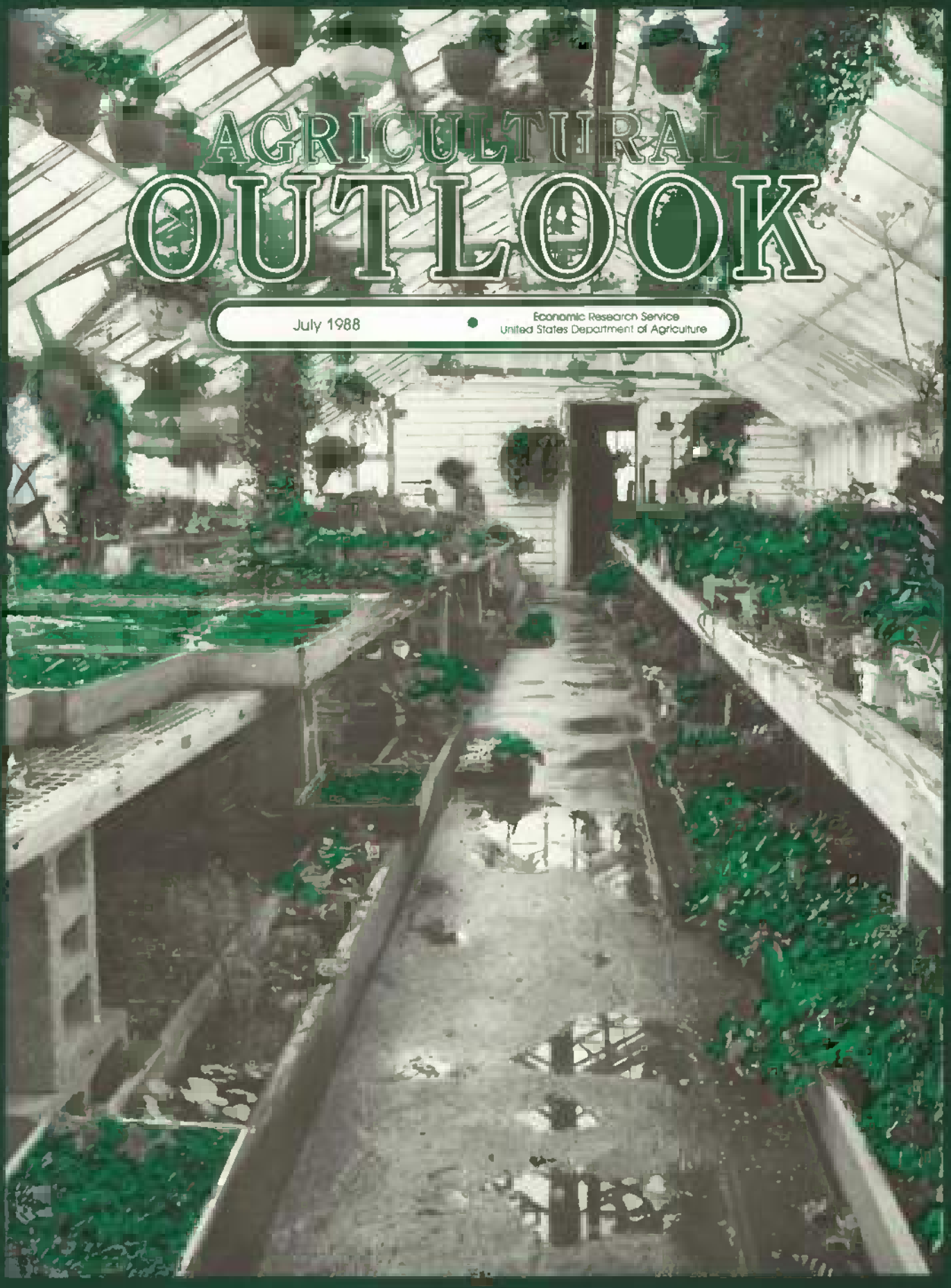

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Special Article

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In Brief . . . News of World Grain Area, Wheat Trade, USSR Policy Changes

Spring-planted crops are under stress from above-normal temperatures and below-average rainfall in many areas. Commodity markets are responding with upward pressure on crop prices. Use is expected to outstrip production for most crops again this year.

Prospects of higher feed costs and lower livestock prices are lowering cattle and hog producers' income outlook. Lack of rainfall this spring raised concerns about pasture and range conditions as cattle movements off spring pastures increased; conditions were the worst since 1934. If marketings of fed cattle rise and their prices drop enough to cause financial losses, feeder cattle prices will also be pushed down.

Increased hog slaughter could lower hog prices in late summer from the $50 per cwt reached in May. Despite lower income prospects for hog and cattle producers, cash receipts for the livestock sector as a whole will about equal last year, thanks to strength in poultry receipts.

The forecast range for farmers' 1988 net cash income has been raised to reflect early June data, but it does not yet reflect potential impacts of the drought. Indicated net cash income is $53-$59 billion, about in line with 1987. Record or near-record livestock receipts and a $4- to $6-billion rise in crop receipts may be offset by lower direct Federal payments and

higher production expenses. Because of the drought, income returns for individual farmers may vary widely.

The world price of nonfat dry milk (f.o.b. European ports) approached the U.S. support price in May. The world price has about doubled from a year ago, and the U.S. support price was lowered. Export interest could quickly exhaust the already reduced nonfat surplus and U.S. dairy farmers could experience an unusual period of volatile markets.

World trade in agricultural commodities and the size of U.S. exports are being affected by changes that Soviet leaders are making in policies and institutions. Among these changes: limited food price increases; a more favorable policy toward foreign trade; relaxation of central control over trade, farm production, and production financing; and a shift of some agricultural investment from production itself to processing and distribution.

Nearly half the strong rise in wheat exports from the 1985/86 low can be attributed to implementation of the 1985 Food Security Act. Included under the act are lower loan rates, resulting in more competitive export prices, and the Export Enhancement Program.

Sales of some types of new farm machinery increased markedly during July 1987-May 1988. However, the rise was probably not the beginning of a surge in demand so much as a response to manufacturers' sales incentives. Farm machinery sales appear to be returning to seasonal patterns and running above a year earlier.

For the first time in the history of the Farm Credit System, one of its banks has been closed. The Jackson Federal Land Bank (serving Mississippi, Alabama, and Louisiana) was placed in receivership in May. The Jackson FLB reported a $44-million loss last year, and had been losing an average of nearly $5 million a month during 1988. Close to 40 percent of its loans were delinquent.

Because of air quality concerns and increased petroleum imports, ethanol is again the focus of public attention. Much of the attention is related to the added demand ethanol production would place on grain markets. Ethanol's competitiveness with petroleum depends, among other factors, on how it is used in blended fuels, the relative prices of grain and crude oil, the efficiency of new ethanol production processes, and continuation of Government subsidies.

Agricultural Economy

Spring planting is complete. About the same number of acres likely were planted to major field crops as last year. In many areas, farmers sowed fields early because spring rains were light. Spring wheat, corn, and soybean seeding was completed ahead of the usual pace.

Early spring planting means less risk of loss from an early frost next fall. Also, corn plants may reach their reproductive stage before the hottest weather. However, a dry spring increases the potential for low yields when plants get off to a poor start, as they have in some areas this year.

Subsoil moisture is particularly short in the Northern Plains and the Southeast. Farmers in these areas depend on frequent summer showers for high yields. A prolonged dry spell likely will not be offset by subsoil moisture accumulations.

Another result of early planting is that farmers were able fully to seed acreage intended for corn. Soybeans usually are put in after corn because they are less sensitive to the number of frost-free growing days. Although the price relationship between corn and soybeans favors soybeans this year, weather and farm programs encouraged farmers to plant corn.

Dryness Creates "Weather Market"

Dry spots in the Eastern United States, the lack of moisture in the Northern Plains, the second year of poor winter snowpack in the West, and lack of optimism in the extended weather forecasts have generated a "weather market" for grains and oilseeds. In recent years such a weather situation would not have had so much impact. This year is different because exports are rising and carryover stocks are falling.

Last fall, wheat at a little under $3 a bushel was somewhat higher than the year before. Since then, larger exports and the realization that stocks could drop below a billion bushels have given the market a further lift. Recently, wheat was selling for nearly $4 per bushel. Corn rose from about $1.75 per bushel last fall to over $2.50 in recent weeks. Volatility has increased.

Soybean price spurts that followed news of dry weather outpaced price dips that followed news of rain. In mid-June, soybeans were about $8.50 per bushel, about $3 above last fall.

U.S. agricultural exports for 1987/88 are expected to top 145 million metric tons, above last fall's forecasts and 16 million tons higher than the preceding season. The increase reflects reduced supplies of several crops in major importing countries, export promotion programs, and the lower exchange value of the dollar. Also, domestic use of grains and oilseeds has been holding up, supported by large meat production and an expanding population.

Despite stronger exports, U.S. farmers remain concerned about agricultural trade. Progress in opening the Japanese market further to U.S. citrus and beef has been made, and Japan offers the potential for substantial export growth. The agreement with Canada will affect U.S. trade in some products. Wide-ranging trade negotiations under GATT could shape not only trade patterns but also farmers' production and financing decisions.

Carryover Stocks Dropping

Farmers are expecting grain and oilseed stocks to continue to drop. By the end of 1988/89, wheat stocks could be down to about 30 percent of annual use. At the end of 1985/86, stocks equaled almost a year's supply. Rice stocks may drop to only about 20 percent of use, compared with 64 percent two seasons ago.

Drought Conditions In Mid-June

Crop conditions in the United States have deteriorated in recent weeks as dry weather has persisted. Farmers in the Northern Plains, West Coast, and Southeast have been hardest hit. In these areas rain is needed soon to prevent severe crop losses. The Corn Belt has also experienced dry weather.

Pasture, range, and forage conditions in many areas have been deteriorating, and pasture conditions at the beginning of the month were the worst since 1934. There is some movement of cattle off ranges because of the lack of forage, but it has not been large yet. Crops in many areas are under stress from heat and dryness, particularly spring wheat in the Northern Plains.

Water levels in rivers used for transporting grain and other agricultural commodities are low and in some instances limiting barge traffic to smaller and lighter loads.

The decline in crop conditions is making agricultural markets more volatile because grain and oilseed stocks, which were burdensome just a couple of years ago, have declined and are in better balance with use. The result is that prices of some crops are more sensitive and fluctuate daily with weather reports.

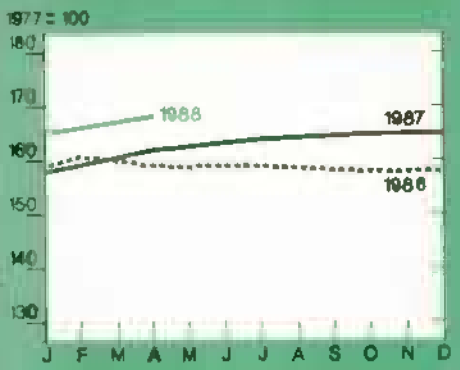
While the 1988 drought is serious and has already had a devastating impact on individual farmers, crop yields in many areas could still be large if rains return to normal soon enough.

Farm prices are already reflecting what the market feels will be the impact of the drought. However, it likely will be late summer before an accurate assessment of farm production can be made.

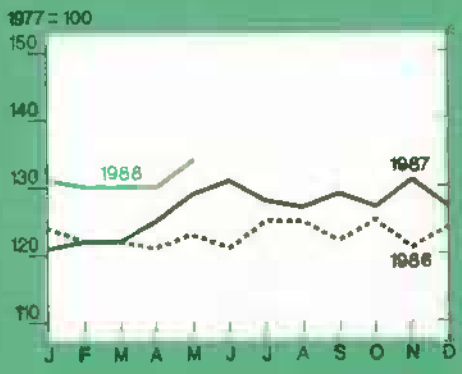
Retail prices lag behind farm price increases. Retail price rises will be moderated by the facts that meat supplies are record large, and that many fruits and vegetables, as well as some major field crops, are irrigated.

Prime Indicators of the U.S. Agricultural Economy

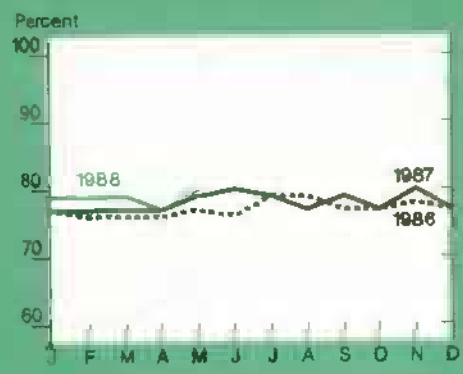
Index of prices paid by farmers[1]



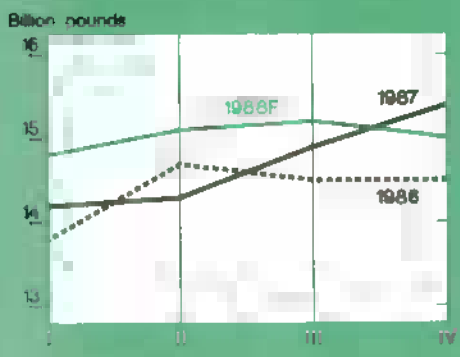
Index of prices received by farmers[2]



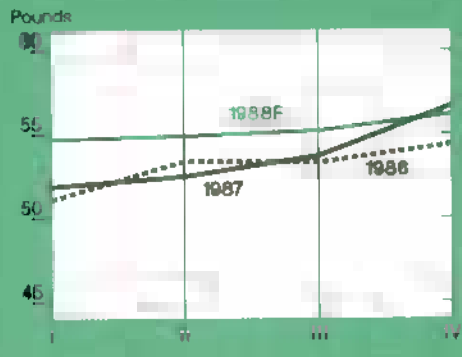
Ratio of prices received to prices paid



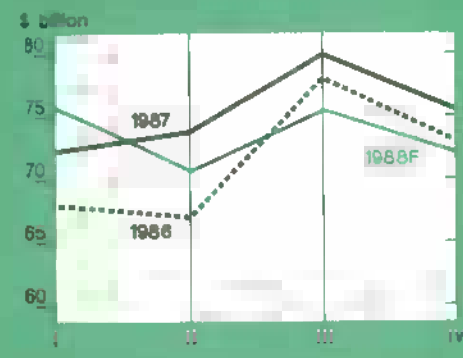
Red meat & poultry[3] production



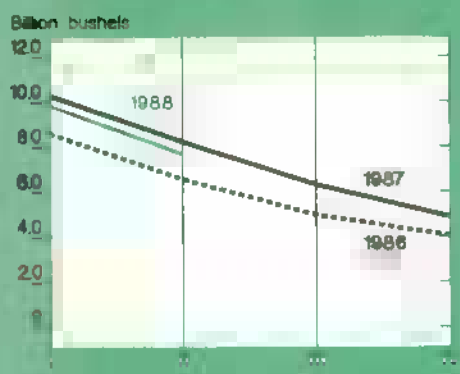
Red meat & poultry consumption, per capita[3,4]



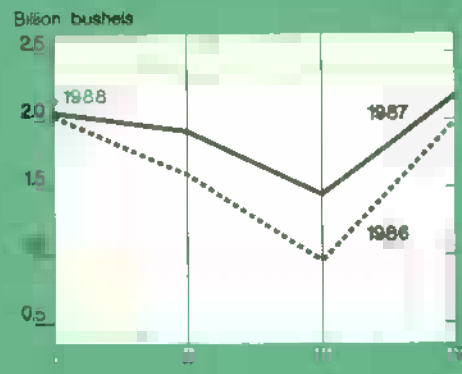
Cash receipts from livestock & products[5]



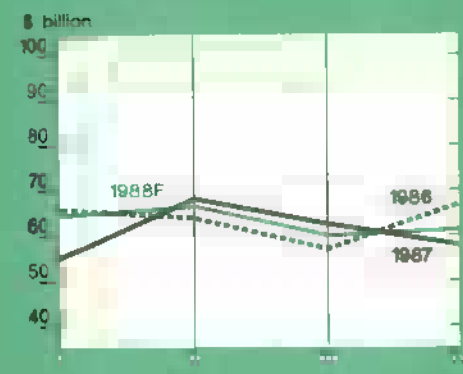
Corn beginning stocks[6]



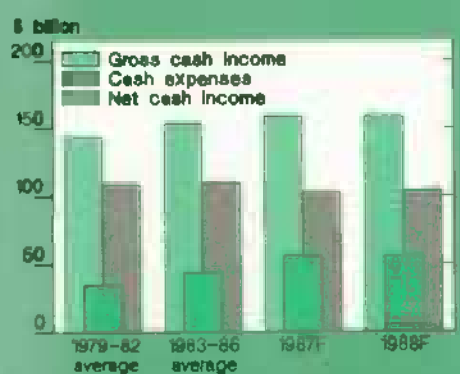
Corn disappearance[6]



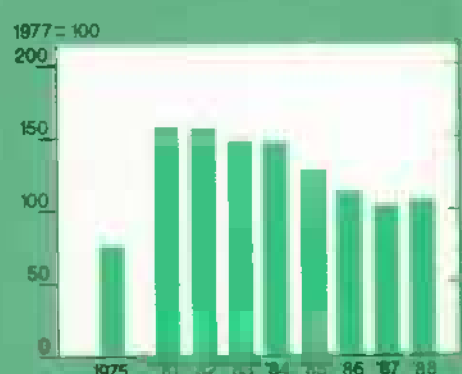
Cash receipts from crops[5]



Farm net cash income



Farm real estate values



Farm value/retail food costs

[1]For commodities and services, interest, taxes, and wages. Beginning in 1986 data are only available quarterly. [2]For all farm products. [3]Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. [4]Retail weight. [5]Seasonally adjusted annual rate. I = Dec.–Feb.; II = Mar.–May; III = June–Aug.; IV = Sept.–Nov. F = forecast.

The decline in corn stocks is less spectacular, but significant. At the end of 1985/86, corn stocks equaled 62 percent of use. Stocks could be down to 40-45 percent by fall 1989.

Soybean stocks are declining sharply. They are seldom as high as most other crops because market prices are typically above the loan rate. Stocks this fall could drop to 13 percent of use, and by next fall only a month's supply may be on hand. Higher prices will ration use.

Cotton is an exception to the lower-stocks pattern. Stocks are likely to edge higher during the next year, to about half of a year's requirements. Even so, stocks are down from three seasons ago, when they were well over a year's needs.

Larger exports and weather problems are not the only developments making markets jittery. Demand for livestock feed is a major question. Feeders vividly remember the runup in crop prices in 1983, when bad weather and a reduction in planted acreage combined to reduce corn and soybean production sharply. Many livestock and poultry producers were caught with large inventories of animals as feed prices soared. Feeding returns suffered.

This year, meat production will be record large, with reduced supplies of beef more than offset by stepped up output of pork, broilers, and turkeys. Meat output will probably grow more slowly in the second half than in the first.

Recent developments in the general economy have added to instability in the agricultural sector, even though 1988 economic growth is stronger than anticipated. The stock market crash last fall might have had a greater impact on commodity markets than it has. Even so, the sharp decline in the stock market added to market uncertainties in farm product and input markets, especially in the winter.

As economic growth continues, demand for agricultural products, especially meats, is being bolstered by rising consumer incomes and higher employment. Recent growth in manufacturing is adding to total employment, helping to boost the number of higher paying jobs.

While farmers making operating decisions face much uncertainty, prices of many farm commodities are higher and the farm situation is somewhat brighter. The rise in farm incomes over the past couple of years and prospects that incomes may hold up again in 1988 have helped farmers get their finances in order.

The increase in farmers' cash flow is reflected in a pickup in farm equipment sales, following a long slide. Land values are turning around in most areas and most farm banks seem to be in better shape than their urban or energy-dependent counterparts. *[Donald Seaborg (202) 786-1880]*

LIVESTOCK OVERVIEW

Total livestock receipts are expected to remain near last year's record of $75 billion, with gains from poultry products about offsetting decreases for dairy, hogs, and cattle.

Prices of red meat and poultry moved higher recently. Omaha choice steer prices rose from $63 per cwt in January to $75 in May, up 19 percent. Pork loin prices climbed because of tight supplies and strong demand; they increased nearly 31 percent (wholesale) between March and May.

Wholesale broiler prices rose 16 percent and turkey prices 5 percent between April and May. The broiler gains reflected general strength in meat prices and also heavy demand for boneless breast by the fast food industry, spurred by a major chain's introduction of a new chicken product.

Forage Deterioration Pressuring Feeder Cattle Prices

Lack of rainfall this spring raised concerns about pasture and range conditions as cattle movements off spring pastures increased. Herd expansion plans may be altered by lack of forage in some areas. Pasture and range feed conditions on June 1 declined to 68, down from 84 a year earlier and below 1977-87's average of 82. Drought worsened in parts of the Northwest and in the North Central area. (See "Drought Conditions in Mid-June" on page 2 for more information.)

Forage supplies still should provide a good base for the smaller cattle inventory. However, some areas are selling cattle earlier than normal, and continued deterioration of forage conditions may reduce the demand for stocker-feeder cattle.

Further downward pressure on feeder cattle prices could come from losses on fed cattle marketings in June-August, if prices begin to decline. Breakeven prices of $72.50-$75.00 per cwt are projected for cattle finished during the summer quarter.

The average wholesale corn price (Central Illinois) rose from about $1.90 per bushel in January-April to over $2.50 in mid-June. As drought concerns rose, feeder cattle prices were pressured. Yearling feeder steers at Kansas City declined from near $90 in early April to $73.50 by mid-June. Thus, the dual impact of feedlot losses and higher grain prices is lowering producers' income.

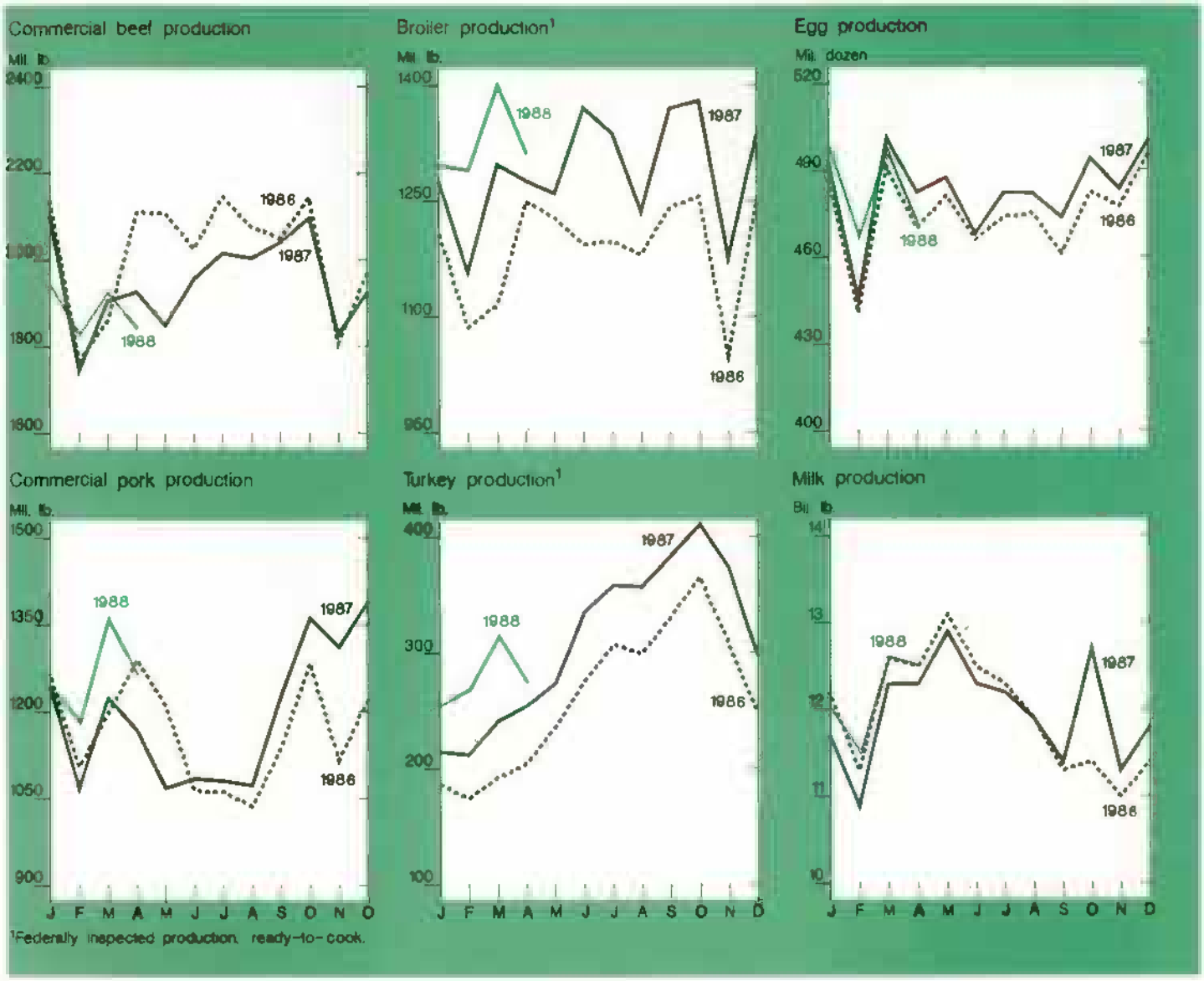
Reduced feeder cattle supplies still are expected to support yearling prices in the upper $70 range. However, a drought in Mexico will increase supplies somewhat, because the Government of Mexico increased the quota for shipment to the United States by 150,000 head, to 1.23 million.

Hog Prices Up, But So Are Feed Costs

Prices of barrows and gilts at the 7 markets averaged $48 per cwt in May, up nearly $6 from April. Hog prices and wholesale pork prices were pulled higher by the sharp advance of wholesale pork loin prices during the first half of May.

Strength in loin prices at this time of year is usually associated with a decline in hog slaughter. However, during the pork loin price rally, weekly slaughter remained above 1.6 million head. Pre-Memorial Day buying was brisk, possibly encouraged by higher prices for competing beef and poultry cuts.

Other pork products initially contributed little to the gain in wholesale values. However, support from the other cuts emerged as slaughter declined in late May and early June.



Barrow and gilt prices reached $50 per cwt in mid-May and are expected to remain firm through early July. Slaughter may hit a seasonal low earlier than normal. If so, the subsequent increase in kills will push prices down in August. However, futures prices in mid-June indicated that prices are expected to average in the low $50's in August and the middle $40's in October.

The dry spring is pressuring feed costs upward. Feed price increases from last August to mid-June added about $9.50 per cwt to the cost of hog production.

The rise in the corn price added about $5 per cwt to feed costs. Soybean meal during the same period rose from $170 per ton to about $270, adding about $4.50 per cwt in production costs.

The combination of higher feed costs and an expected drop in hog prices in late summer could put producers in a loss situation in late summer or early fall. If so, more than a year will have passed from the peak of profitability to first losses. Since 1965, hog profit cycles have shown a period of 7 to 14 months from peak profits to losses.

In view of the high level of profitability over the past 2 years, and the trend toward larger operations, producers are not expected to begin liquidation of their herds unless feed prices continue to escalate.

Broiler Prices Strong

The 12-city wholesale broiler price ranged above 56 cents per pound during May. At the same time, boneless breast prices in the Northeast rose to around $2.60 per pound. The unexpected strength probably reflected promotional items for fast-food restaurants. Prices through the third quarter are expected to remain strong but below current levels, unless summer heat reduces supplies.

Broiler production during 1988 is forecast to increase 5 percent. First-quarter production was about 7 percent larger than a year earlier. Average slaughter weights during the quarter were less than 1 percent above the same period in 1986, continuing a trend towards higher weights. February, March, and April hatches were 5 percent above a year earlier. Production in the second quarter likely was 6 percent above a year earlier.

The broiler hatching-egg flock on May 1 was 2 percent above a year earlier. This flock is comprised predominantly of broiler-egg layers. Third-quarter production is expected to be 5 percent above a year ago.

The estimated broiler hatchery supply flock, based on pullets placed 7-14 months earlier, is a longer term indicator of broiler production than the hatching-egg flock size. The estimates which correspond with fourth-quarter slaughter were about even with the same period a year earlier. Fourth-quarter production likely will be only 2 percent above a year earlier. The estimate for November, an indicator of January 1989 slaughter, was 3 percent below 1987.

The 12-city wholesale composite price for broilers was 45 cents per pound in first-quarter 1988, compared with 50 cents a year earlier. Prices rose during the second quarter, likely averaging 53-54 cents. May's price was 56 cents, compared with 51 a year earlier.

Broiler prices will remain above a year earlier but will be tempered by large meat supplies during the third quarter. Prices may average 49 to 55 cents, because of higher summer demand. Fourth-quarter prices will soften seasonally, averaging 44 to 50 cents. The average price for 1988 is expected to be between 47 and 53 cents.

Turkey Output May Grow More Slowly

The rate of increase in turkey production appears to be leveling off for the second half of 1988. Placements during March and April were 1 and 8 percent below a year earlier, respectively. Cumulative placements for September 1987 through April 1988 slaughter were 7 percent ahead of a year earlier. Eggs in incubators on May 1 were 5 percent below a year earlier. Production for all of 1988 likely will be 10 percent above 1987.

First-quarter turkey production, at 860 million pounds, was about 25 percent ahead of a year before. Poult placements indicate second-quarter production was up about 13 percent. The rate of increase in production will slow dramatically in the third and fourth quarters, with expansion of 4 percent expected in each.

Turkey stocks, at 384 million pounds on May 1, were approximately 53 percent greater than a year earlier. As production begins to level or drop below 1987, the stock buildup is expected to slow.

Wholesale prices for Eastern region hen turkeys dropped from 52 cents a pound in January to 47 in February and March, down from the 58-cent average for the same quarter in 1987. Prices began to move up in May, averaging 49 cents, compared with 55 a year earlier. Prices likely averaged 50-51 cents during the second quarter.

Prices are expected to rise seasonally during the third and fourth quarters, although ample supplies of chicken and pork will mute the increase. Third-quarter prices likely will average 54 to 60 cents. Prices for all of 1988 are expected to average 51 to 57 cents, down from 58 in 1987.

U.S. turkey exports were 13 million pounds during first-quarter 1988, up 122 percent from the same period in 1987. Value was $5.3 million, 69 percent above last year. The increase corresponded with relatively low U.S. turkey prices, particularly for parts. The four leading importers, Taiwan, West Germany, Egypt, and Canada, took two-thirds of the turkey meat exported.

Cut-up turkey made up 88 percent of the exports, and average export unit values were down 17 percent from last year's first quarter, to 38 cents a pound. Exports to Canada averaged 70 cents, but the average unit value to Egypt was only 22 cents a pound. Turkey exports for all of 1988 are expected to be up about 30 percent from 1987's 33 million pounds.

Egg Receipts Below Costs

Egg production continues to be unprofitable, according to USDA estimates, even though egg prices began to move up during the last half of May. Estimated net losses were more than 13 cents per dozen during May. Producers sustained losses during 11 out of 13 months. Recent USDA purchases of dried egg mix and frozen eggs provided some price support during May.

Egg production for 1988 is expected to fall less than 1 percent; per capita consumption is expected to fall 2 percent, to 243 eggs. First-quarter output, at 1,462.6 million dozen, was 1.7 percent greater than a year earlier. Production in the second quarter likely was 1 percent below a year earlier. Production is forecast to decrease another 2 percent in the third quarter and 1 percent in the fourth.

The U.S. flock on May 1 was about 2 percent below a year earlier. This was a result of increased slaughter of light-type hens during November 1987-April 1988. Eggs per 100 layers on May 1 were the same as a year before.

Prices of wholesale grade A large eggs in New York are forecast to average 56-62 cents per dozen during 1988, below the 62 cents of 1987. Prices averaged 55 cents for the first quarter, compared with 65 cents last year.

Second-quarter prices probably averaged 52-54 cents. Prices are projected to rise during the second half of 1988 because of seasonally heavier demand for fourth-quarter holiday baking and lower production than a year earlier.

Steeper World Prices for Nonfat Dry Milk

The markets for nonfat dry milk and other milk protein products may soon have to cope with a force rarely felt—export demand. The international market price of nonfat dry milk (f.o.b. European ports) has risen sharply and by late May was approaching $1,600 per metric ton for recently produced powder.

The current U.S. support price is $1,604 per metric ton. If recent international prices hold this summer and autumn, the U.S. commercial market may become the least expensive source for some international customers.

International prices of nonfat dry milk have about doubled since a year ago. In

recent years, nonfat dry milk production has fallen; milk surpluses have been reduced in the EC by use of milk production quotas, and reduced in the United States by a combination of support-price reductions and the Dairy Termination Program.

Meanwhile, a fairly high level of world exports was maintained by drawing down government stocks of nonfat dry milk both here and in the EC. With these stocks now down to small working levels, prices have risen sharply. Reductions in the U.S. support price contributed to narrowing the price gap. Since early 1985, the U.S. support purchase price has been lowered by about $400 per metric ton.

Thus far, the higher international prices for nonfat dry milk have had limited impact on domestic markets. Casein prices are tied to international prices of nonfat dry milk. Sharply higher casein prices, and some export interest, have pushed prices of dry buttermilk and whey protein concentrate very close to nonfat dry milk prices. Dry whey prices rose about 5 cents per pound between late March and late May.

In late May, substantial quantities of nonfat dry milk were sold to the U.S. Government at the support purchase price. Despite these sales and the fact that production was at a seasonal peak, premiums above the support price became increasingly common for commercial sales.

If international prices for nonfat dry milk stay at current levels or higher, the domestic markets for high-protein dairy products could be volatile during the rest of 1988. Export interest might quickly exhaust the domestic nonfat surplus and start prices rising.

The key to international price patterns will be EC policy actions. The EC feeds animals an amount of nonfat dry milk roughly equal to world exports (excluding intra-EC trade). EC officials have relaxed requirements for inclusion of nonfat dry milk in formulated feeds and reduced feeding subsidies.

If the EC shifts substantial amounts from feed to the export market, international prices of nonfat dry milk could drop sharply. In the long run, international nonfat dry milk prices are unlikely to equal U.S. domestic prices. Price strength in international markets tends to be brief. Stronger export markets remove some of the pressure to curb surpluses in countries that export under subsidy. *[Lee Christensen (202) 786-1714]*

For further information, contact: Kevin Bost and Leland Southard, hogs; Mark Weimar and Bob Bishop, broilers, turkeys, and eggs; Steve Reed, cattle; and Jim Miller, dairy. All are at (202) 786-1285.

FIELD CROP OVERVIEW

Based largely on pre-drought conditions, U.S. grain production in 1988/89 has been forecast at 282.6 million metric tons, up about 2 percent from a year earlier. This expected 5.6-million-ton expansion is spread among all grains, with wheat, rice, and feed grains each expected to increase. However, spring-planted crops are under stress from above-normal temperatures and below-average rainfall in many areas. (See "Drought Conditions in Mid-June" on page 2 for more information.)

With use outstripping production by almost 35 million tons in 1987/88, grain beginning stocks in 1988/89 are forecast at 165 million tons, the lowest since 1985/86. Paced by an increase in corn feeding, domestic grain consumption is forecast to rise by around 2 million tons.

USDA announced the preliminary results of the 1988 farm program signup on May 19. Contracts will place almost 188 million acres of wheat, feed grains, upland and extra-long staple cotton, and rice in the 1988 acreage limitation programs.

This total represents over 83 percent of the total crop acreage base established for these commodities, compared with 86.5 percent for the 1987 programs. Under a voluntary paid land diversion program, 4.1 million acres will be diverted, the bulk of which is normally planted to corn.

U.S. Wheat Output Forecast at 58 Million Tons

World wheat production in 1988/89 is expected to rise 3 percent as several major producers, particularly the Soviet Union and Europe, rebound from weather problems in 1987/88. Much of the recovery in production will be among importers.

However, at 536 million tons, world consumption will exceed production. Thus stocks, already at reduced levels, are expected to fall further to 133 million tons by yearend. Exports are forecast down 4 percent because of reduced import demand and prospects of tight supplies.

U.S. wheat production in 1988/89 is forecast, based on pre-drought conditions, at almost 58 million tons, up slightly from the 2 previous years. Even though exports are forecast to decline modestly for the year, total use (including exports) is projected to exceed production by more than 20 percent. This would reduce wheat ending inventories by 12 million tons. Total use in 1988/89 is forecast at 70.5 million tons, down about 4 percent from a year earlier.

The anticipated decline in wheat ending inventories and continuing dry weather are boosting market prices. In 1987/88, the average price received by farmers was up to $2.55 per bushel from $2.42 a year earlier, largely because of a one-third reduction in total stocks.

With inventories projected to fall again in 1988/89 by more than one-third, market prices are forecast to rise to $2.90-$3.30 per bushel. While prices are already climbing from their recent lows, average market prices through most of the 1980's were even higher, peaking at $3.99 per bushel in 1980/81.

There is concern about the domestic wheat crop because of dryness in key spring wheat producing States and disease elsewhere. In general, winter weather was favorable for wheat, limiting winterkill and consequently reducing abandoned area. But, prolonged dryness in some areas may cut yields from peak levels, despite spotty rainfall during the last half of May.

Additionally, in some areas, the mild winter allowed damaging pests such as the Russian wheat aphid to survive and spread disease; in other areas wheat streak mosaic is common much earlier in the season than normal.

Because of low world stocks, the export share of U.S. competitors taken together is not forecast to change in 1988/89, despite improved production. Argentina and the EC are likely to increase production and exports, but their supplies and exports are not expected to rise enough to offset projected declines in Canadian and Australian exportable supplies. Coming into 1988/89, both Canada and Australia have low stocks. (For more details, see the Commodity Spotlight entitled "Competitors' Grain Crops To Change Little.")

Competitors' low supplies may keep world prices and demand for U.S. wheat strong. Although U.S. exports are expected to drop 2.8 million tons as world demand falls, the U.S. share of world exports (excluding intra-EC trade) is projected to remain over 40 percent.

Because of the expected growth in EC production, the Export Enhancement Program (EEP) initiatives are likely to continue to play a key role in keeping U.S. exports competitive, particularly in North Africa, the Soviet Union, and Eastern European markets.

Greater World Coarse Grain Output Likely

World coarse grain production in 1988/89, based on pre-drought conditions, is projected at 805 million tons, 2 percent above this season but 4 percent below the 1985/86 record. Most of the gain is expected in corn.

U.S. planting intentions in 1988/89 indicate feed grain area of over 104 million acres, slightly more than 2 percent below a year earlier. Of this, corn is up to 66.9 million acres, sorghum down to 10.7 million, and oats down to 16.3 million. Barley area may decline by almost 500,000 acres to below 10.3 million.

Foreign coarse grain production in 1988/89 is projected at a record 585 million tons, 2 percent above 1987/88. Several producers, including India, Thailand, and Eastern Europe, are expected to experience substantial recovery from 1987/88's weather-reduced production. Australia and the EC are expected to continue to increase production, while the Soviet Union and Canada are likely to reduce it. Little change is expected in Argentina.

At 825 million tons, world coarse grain consumption will exceed production. Slight domestic consumption gains are expected this year, and with a modest increase likely for U.S. exports, total coarse grain use is projected to exceed 241 million tons. Although this is only 3 million tons more than 1987/88, it is 13 million tons above 1986/87.

Despite an anticipated U.S. corn stock drawdown of almost 20 percent in 1988/89, yearend inventories likely will remain large, triple the level of 1983/84. The range of forecast corn prices for 1988/89, at $1.65-$2.00 per bushel, is much broader than the estimated range of $1.75-$1.85 for 1987/88.

World import demand is expected to rise nearly 4 percent in 1988/89, led by gains in East Asia. This would be the first significant increase in world trade in 4 years.

Because of higher production, major competitors will have greater exportable supplies and are expected to increase exports. In 1988/89 Thailand likely will recapture some of the corn markets it lost in 1987/88 because of drought. Eastern Europe's corn exports should rebound while its imports drop.

Because of larger foreign supplies, the U.S. market share of coarse grain trade (excluding intra-EC trade) may slip from 1987/88's 63 percent down to 61, but U.S. exports likely will increase slightly from this season's 51.8 million tons, to 52.0 million. Corn exports are forecast to rise to 44.5 million tons, compared with 43.2 million in 1987/88. However, U.S. sorghum and barley exports may drop slightly.

World Oilseed Production To Expand

World oilseed production in 1988/89 is projected at a record 208 million tons, up 1 percent from 1987/88, with all of the increase coming from foreign competitors. If foreign competitors respond to a continued high soybean-corn price ratio, foreign production may rise.

Argentina is now harvesting a soybean crop approaching a record 10 million tons, compared with 1986/87's 7 million tons. Brazil's soybean production, while less than earlier forecast, is still larger than last year. Argentine and Brazilian soybean/soybean meal exports will rise 4 and 5 percent respectively, during 1987/88. A larger share of South American exports will spill into 1988/89, in direct competition with U.S. new-crop exports.

The U.S. soybean outturn for 1988/89 is likely to fall over 600,000 tons from the previous year, putting production at 51.2 million tons. Planting intentions are higher than the 1987/88 planted area. But, with yields assumed to decline to near trend (based on pre-drought conditions), production will be smaller.

Because of increased foreign competition and a reduced U.S. crop, U.S. exports of soybeans, meal, and oil are likely to fall. U.S. soybean exports are projected at 20.4 million tons, 6 percent less than 1987/88. Meal exports are forecast down 3 percent to 5.9 million tons, and oil exports are estimated at 800,000, down from 1 million in 1987/88.

By 1988/89's end, U.S. soybean stocks are projected to fall to 4.2 million tons, as consumption continues to outpace production. With total use forecast at 54.4 million tons, stocks are likely to drop 44 percent during the year. Throughout the 1980's, average soybean ending stocks have been over 9 million tons; they peaked in 1985/86 at 14.6 million.

With forecast inventories at their lowest since 1976/77, prices will be pressured upward. The range for average soybean prices in 1988/89 is expected to be $5.75-$7.75 per bushel, compared with $5.90 in 1987/88.

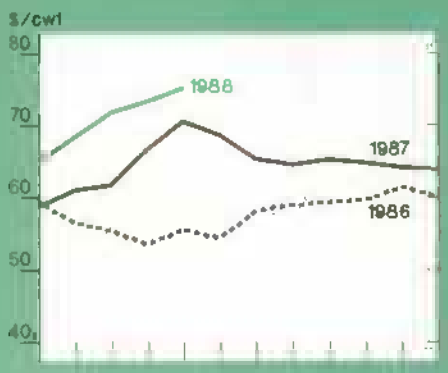
Global Cotton Outturn Increases; U.S. Declines

In 1988/89, world cotton production is projected to reach 83.5 million bales, 5 percent more than in 1987/88. Area and yield will both increase. All of the growth will be in major U.S. competitors. India and the Soviet Union are likely to recover from this year's weather-reduced crop, while China plans continued growth.

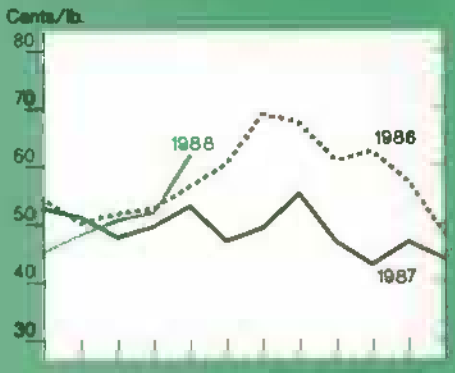
U.S. production is forecast, based on pre-drought conditions, at 14 million bales, down 5 percent from 1987/88. Lower yield is likely to offset expanded acreage, but total U.S. use of 12.9 million bales will fall below production, as

Commodity Market Prices

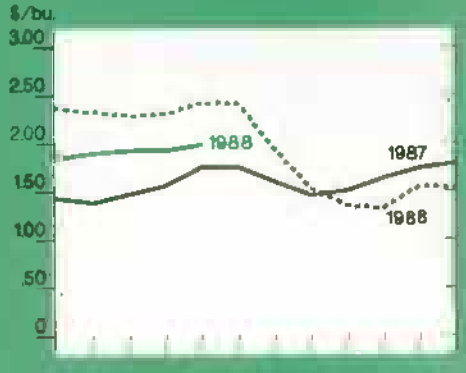
Choice steers, Omaha



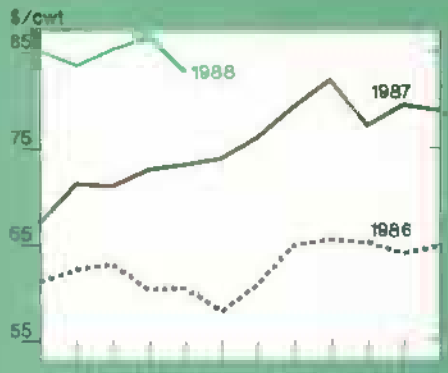
Broilers, 12-city average



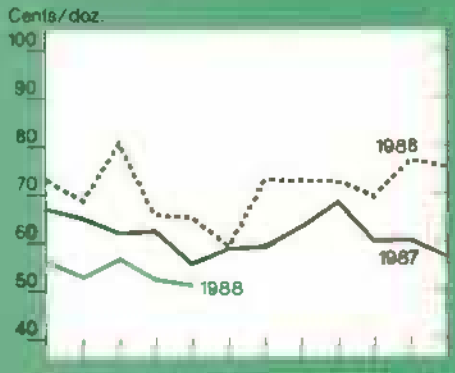
Corn, Chicago[3]



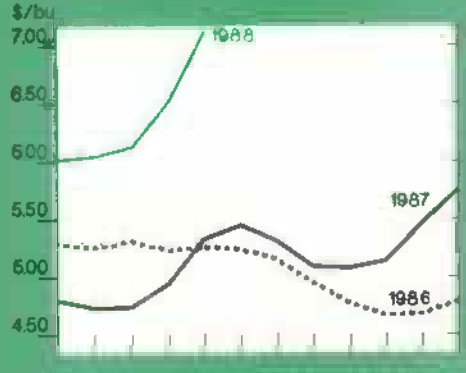
Feeder cattle, Kansas City[1]



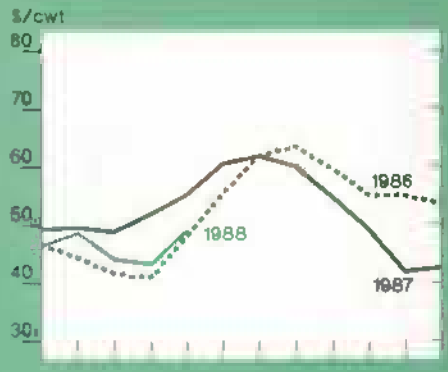
Eggs, New York[2]



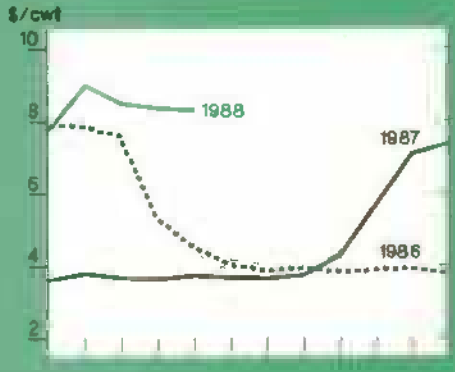
Soybeans, Chicago[4]



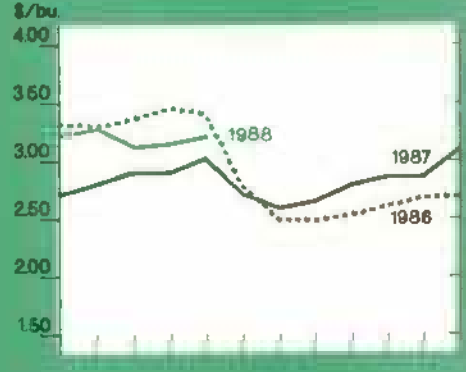
Barrows and gilts, 7 markets



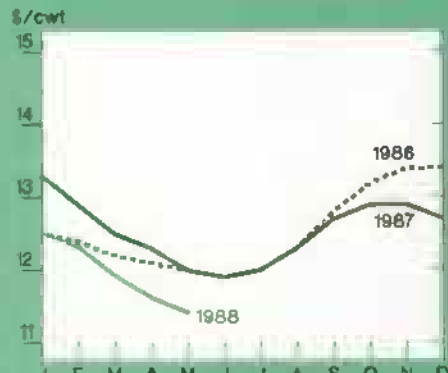
Rice (rough), SW Louisiana



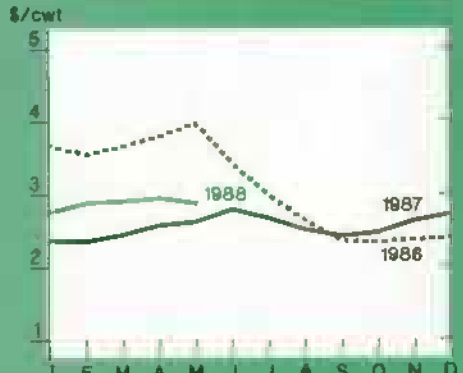
Wheat, Kansas City[5]



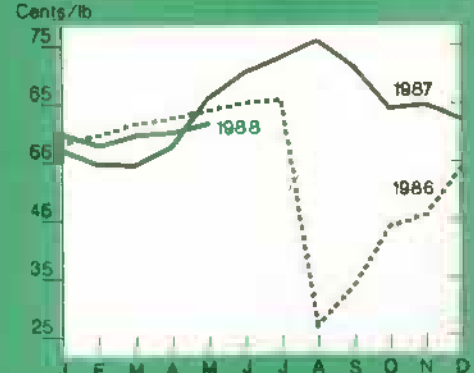
All milk



Sorghum, Kansas City



Cotton, average spot market



[1]600–700 lbs., medium no. 2. [2]Grade A Large [3]No 1 Yellow. [4]No. 2 Yellow. [5]No 1 HRW.

Generic Certificate Update

As of March 31, about $17.9 billion worth of generic certificates had been issued since the program began in April 1986. An estimated $2.1 billion were mailed out in May and June as 1988 advance deficiency payments to producers of wheat, feed grains, upland cotton, and rice, and $0.7 billion were paid to feed grain producers as advance diversion payments.

Total certificate redemptions as of May 31 approached $17.1 billion, placing near-term availability at $3.6 billion. Future issuances, including emergency compensation "Findley" payments for wheat, barley, and oats in July, and expected EEP and TEA program payments, could bring certificate availability for the rest of fiscal 1988 to between $3.8 and $4.3 billion.

Certificates were trading at or below par value in most locations during May.

Wheat Exchanges
Fall Off

Total certificate exchanges for April 15-May 17 were $945 million. Of this, approximately 88 percent were for corn ($835.8 million) and only 8 percent for wheat ($71.8 million). Cumulative exchange shares since April 1986 are 72 percent for corn and 20 percent for wheat.

Much of the wheat decline can be attributed to the drop in wheat exchanged through the weekly auctions. From April 15 to May 25, only 17.2 million bushels were exchanged through the competitive bid process, bringing total exchanges through wheat auctions since November 6, 1987, to 383.6 million bushels. By comparison, over 180 million bushels were auctioned during December and January.

Exchanges for CCC-owned corn were heavy from April 15 through May 27; over $517.3 million of certificates were exchanged for CCC-owned corn. This reflects almost 40 percent of total corn exchanges. More than 278 million bushels of CCC-owned corn were exchanged, including 254 million listed in CCC catalogs.

As of May 25, approximately 2.1 billion bushels of corn were outstanding under the regular loan program, including 1.5 billion of the 1987 corn crop. USDA as of June 9 projected September 1 outstanding CCC corn loans at 1.4 billion bushels. This implies loan redemptions of approximately 765 million bushels for the remainder of the 1987/88 corn marketing year.

Assuming an average posted county price (PCP) of well above $2.00 for the remainder of 1987/88 would imply a corn certificate need of $1.5 billion if all outstanding loans were redeemed with certificates. Exchanges for CCC-owned corn could add another $0.3 billion, bringing total certificate exchanges for corn to $1.8 billion.

Based on historical exchange patterns (77 percent of all exchanges have been made for corn), projected total certificate needs for the remainder of fiscal 1987/88 could approach $2.3 billion.

However, if current weather conditions worsen and corn PCP's average over $2.50 for the remainder of the corn marketing year, certificate needs for the balance of fiscal 1987/88 could approach $2.8 billion.

With current certificate supply for fiscal 1987/88 estimated between $3.8 and $4.3 billion, certificate carryover could range between $1.0 and $2.0 billion.

both exports and mill consumption drop. U.S. mill use is projected to fall from this season's 7.75 million bales to 7.2 million.

Both U.S. and world stocks will climb because of reduced demand—a result of rising textile inventories and slowing disappearance. World consumption is not expected to continue the growth of the last few years; it is forecast to stabilize at 82.5 million bales, roughly equal to 1987/88.

Important cotton importers—the EC, Korea, Taiwan, and Hong Kong—may reduce use. But, consumption is expected to rise among major producers such as China, India, and the Soviet Union, whose use is primarily domestic. This will about offset declines in consumption among importers.

Nevertheless, declining importers' use will reduce trade. World cotton exports are forecast to fall from nearly 24 million bales in 1987/88 to 23 million in 1988/89, a 4-percent decline. As world exports fall, U.S. exports are projected to drop from 6.55 to 5.7 million bales.

The U.S. market share is likely to retreat from this season's near-normal 28 percent to only 25 percent because of greater 1988/89 foreign production and large carryover from the 1987/88 Southern Hemisphere crop now being marketed at lower prices. *[James Cole (202) 786-1840 and Carolyn Whitton (202) 786-1826]*

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Peter Riley, world feed grains; Larry Van Meir, domestic feed grains; Tom Bickerton, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, domestic peanuts. World information (202) 786-1824; domestic, (202) 786-1840.

HIGH-VALUE CROP OVERVIEW

Sugar Demand Stronger
As Substitute Use Levels Off

Renewed strength in sugar demand indicates that high fructose corn syrup (HFCS) may have replaced about as much sugar as it can until improved forms or new uses for this substitute become available. In addition, growth in low-calorie sweeteners (saccharin and aspartame) has slowed.

The 10-year decline in U.S. sugar deliveries appears to have bottomed out in fiscal 1985/86, and deliveries may be starting to rise. Fiscal 1986/87 deliveries rose 3.2 percent to 8.046 million tons. Deliveries for the first half of fiscal 1987/88 rose 4.2 percent over the same months the year before. Fiscal 1987/88 deliveries probably will exceed 1986/87 by around 2.5 percent.

Certificate Needs for Fiscal 1989 Likely To Fall

Certificate needs for fiscal 1989 will depend on the size of the corn and wheat harvests and on export and domestic demands. A short crop could send harvest prices well above 1988 crop loan repayment levels, reducing opportunities for so-called "Quick PIK's," in which producers simultaneously place crops under loan and exchange them for certificates.

Cumulative Generic Certificate Exchanges as of May 31, 1988

Commodity	CCC inventory 1/	Producer loans	Total
Food grains			
Wheat			
Volume (mil. bu.)	729.0	563.3	1,292.3
Value (mil. $)	1,856.9	1,434.7	3,291.6
Rice			
Volume (mil. cwt)	42.2	0.3	42.5
Value (mil. $)	153.9	1.3	155.1
Feed grains			
Corn			
Volume (mil. bu.)	860.1	6,301.8	7,161.9
Value (mil. $)	1,491.1	10,924.2	12,415.3
Grain sorghum			
Volume (mil. bu.)	114.5	430.8	545.3
Value (mil. $)	201.2	757.5	958.7
Barley			
Volume (mil. bu.)	76.6	118.0	194.5
Value (mil. $)	108.9	167.9	276.8
Cotton			
Volume (mil. bales)	.89	5.98	6.87
Rye, oats, soybeans			
Value (mil. $)	14.5	31.5	46.1
Total value (mil. $) 2/	3,826.5	13,317.1	17,143.6

1/ CCC loans as of May 27, 1988. 2/ Does not include values for cotton exchanges.

Source: Agricultural Stabilization and Conservation Service, USDA.

USDA projections for the 1988/89 wheat marketing year indicate that use will exceed production plus imports by 435 million bushels. As much as 150 million bushels of CCC and Farmer-Owned Reserve stocks could be freed up through certificate exchanges to meet this need.

Estimates for the 1988/89 corn marketing year indicate an imbalance of 723 million bushels that will have to come out of beginning stocks. At a season average PCP of $1.80 a bushel for corn and $3.00 a bushel for wheat, certificate needs could range between $1.6 and $1.8 billion.

However, if another bumper corn crop pushed season average prices down to $1.65 to $1.75 a bushel, corn producers in the first two quarters of 1988/89 likely would have "PIK and Roll" opportunities (exchanging certificates for crops placed as loan collateral).

Based on 1987/88 exchanges, this would imply an additional certificate need of $2.5 to $3.0 billion. This could bring total certificate use for fiscal 1989 to $4.1-$4.8 billion, implying possible need for an additional $2.1 to $3.3 billion in issuances. *[Joe Glauber (202) 786-1840]*

Per capita use of all sweeteners stood at 152.4 pounds of sugar equivalent in calendar 1987, up from 124.2 in 1975. From 89.2 pounds in 1975, refined sugar use per person fell 30 percent to 60.2 pounds in 1986. Sugar use rose to 62.2 pounds in 1987 and is forecast at 62.6 pounds in 1988.

HFCS accounts for more than 95 percent of all caloric sweeteners used in beverages, where its liquid form does not affect the product's quality. Sugar continues to be the major sweetener in uses where substitutes fail to achieve desired product characteristics. Bakery goods, for example, need sugar to maintain desirable color and texture, and jams and jellies need sugar to jell properly.

After 12 years of rapid growth, HFCS consumption per capita appears to be leveling off. From only 5.0 pounds in 1975, growth in per capita consumption averaged about 4.0 pounds per year, reaching 45 pounds in 1985. During 1986 and 1987, though, HFCS use increased by only 1 pound per person per year.

Slower growth indicates the HFCS market is maturing; additional gains will rely on population and income expansion rather than on substitution for other products. Additional growth spurts are unlikely without emergence of major new uses or development of a cheaper process for producing crystalline fructose or dry HFCS.

Low-calorie sweetener consumption received a boost when aspartame was introduced in the U.S. market in 1981. After rising rapidly through 1985, aspartame and overall low-calorie sweetener consumption grew more slowly. From 6.1 pounds of sugar sweetener equivalent in 1975, consumption rose an average of 1.2 pounds per year to 1985. Over the last 2 years, though, it has climbed only about 0.67 pound annually. In 1987, it reached 20 pounds per capita.

Low-calorie sweetener use per capita will continue to grow at a slower pace in 1988. Most near-term growth will be tied to the uptrend in diet soft drink consumption, which is rising more rapidly than use of regular soft drinks. Aspartame has replaced saccharin in many products and accounts for about 70 percent of all low-calorie sweetener consumption.

Longer term growth depends on approval of new uses for the present low-calorie sweeteners, approval of new low-calorie sweeteners, or a reduction of low-calorie sweetener prices. The U.S. Food and Drug Administration approved aspartame use in six new product areas in early June.

Keep the Fruit Bowls Full

Abundant supplies of peaches, plums, apricots, nectarines, and sweet cherries will make fresh fruit a good buy this summer.

California's estimated sweet cherry production for 1988 fell below year-earlier output, but it still is four times the size of the unusually small 1986 crop. Prospects for good crops in Washington and Oregon should bring this season's output to 151,000 tons, 14 percent less than last season but 32 percent greater than 1986.

USDA forecasts total peach output up 8 percent from 1987. The peach crop looks normal or better in most of the major production areas. The exception is in Michigan, where severe spring weather damaged peaches, but even there growers anticipate large fruit.

California plum production is forecast at 260,000 tons, up 6 percent from last year. Plum acreage has been rising over the past several seasons, and growers anticipate a good yield this year. Despite likely strong export demand, more production and larger domestic shipments probably will lower prices.

California nectarine production estimates stand slightly above 1987, and 13 percent above 1986. Crop quality appears excellent.

Apricot production is forecast 4 percent below last year, but more than double 1986's small crop. The crop appears in good condition.

Estimates of Bartlett pear production are 10 percent below the 1987 record output, but 11 percent higher than the harvests for 1985 and 1986. Despite the smaller crop this year, supplies will be adequate.

Estimates of California's clingstone peach production indicate a 4-percent larger crop this year. Strong domestic demand for canned peaches has drawn stocks about one-third lower than last year's low. Low stocks and strong demand this year should mean higher grower prices for clingstone peaches.

Smaller Potato and Dry Bean Crops May Strengthen Prices

Prospects for sharply lower dry bean production and somewhat lower potato output in 1988 are providing strength to otherwise low prices. Despite the large dry bean harvest in 1987 and fewer-than-expected exports, particularly of navy beans, prices strengthened throughout the winter and spring.

The U.S. price for all bean types averaged $13.10 per cwt in December, down from $22.00 the year before. However, during May the average price had risen to $18.20 per cwt, compared with $19.00 a year earlier.

Typically, dry bean prices in the latter half of the marketing season reflect expectations about the size of the following year's crop. In marketing years prior to an expected large crop, such as 1985/86, prices usually move downward or remain relatively flat as the season progresses. In years prior to an expected small crop, prices move upward, as in 1982/83, when prices advanced from $12.00 in January to $15.60 in June.

Prices for the 1987/88 marketing year seem to be following the pattern associated with expectations of a small crop. Dry bean farmers' March planting intentions indicated they planned to cut dry bean acreage 23 percent from 1987. Dry conditions in Michigan at planting time may also be causing concern among buyers about the size of the 1988 crop.

Potato prices have been inching upward since April despite the largest May 1 stocks of fall potatoes on record. One factor boosting prices may be expectations for a smaller crop in 1988 than in 1987. Usually, planted acres and production fall following a season with generally low prices, such as 1987. *[Glenn Zepp (202) 786-1883]*

For further information, contact: Ben Huang, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco. All are at (202) 786-1886.

Commodity Spotlights

Ornamental Horticulture Industry Is Blooming

Floriculture and ornamental horticulture, from farm and greenhouse production to retail sales at nurseries and chain stores, are among the fastest growing sectors in agriculture. Domestic and world production, consumption, and trade in flowers and plants have expanded faster over the past decade than the general economy, and faster than most other agricultural subsectors.

Industry Produces One-Tenth Of All Crop Cash Receipts

Grower cash receipts from marketings of U.S. greenhouse and nursery crops (excluding food crops grown under cover) reached $5.80 billion in 1986, a 9.6-percent annual average growth rate since 1982. Receipts grew from 5.0 percent of all crop receipts in 1981 to 9.1 percent in 1986. For 1987, receipts are estimated to have grown to about $7.0 billion, or 11 percent of all crop cash receipts.

Some reasons for this 19-percent jump from 1986 include greater expenditures for sod and other landscape ornamentals used in the housing industry; citrus nursery stock sales in Florida to replace freeze-killed citrus trees; and higher personal consumption expenditures for cut

flowers, bedding plants, and other ornamental crops such as houseplants and outdoor foliage, trees, and shrubs.

A recent USDA survey of 28 domestic floral and foliage crops in 28 States showed that they accounted for grower sales of $2.15 billion in 1987, a 13-percent increase over the previous year. This annual survey of wholesale sales, conducted by the National Agricultural Statistics Service, shows that in 1987:

- fresh cut flowers rose 13 percent in value to $407 million;
- potted flowering plants, valued at $460 million, increased 18 percent;
- cut cultivated florist greens, at $88.3 million, rose 15 percent;
- bedding plants (including vegetable, flowering, and foliage types) jumped 22 percent to $682 million; but
- foliage plants (including hanging baskets and potted plants) decreased 2 percent from 1986, to $513 million

Wholesale Grower Value Was $300 Per Capita Last Year

Domestic sales of cut flowers through all sales outlets were $26 per person in 1987, while all other floral and plant crop sales totaled $274 per person, according to ERS analysis. This results in a total wholesale grower value of $300 per person last year for all domestic market sales of U.S.-produced and imported ornamentals and nursery crops.

According to industry data sources, retail sales of fresh cut flowers and potted house plants grew from $2.7 billion in 1975 to $8.3 billion in 1986. Sales of floral and foliage products, excluding greenhouse and nursery sales, grew from $10-$11 per person in 1980 to $20-$21 in 1986. However, sales per person in the United States and some other developed nations are still only half, or perhaps as low as one-third, of those in many European countries.

There are approximately 51,000 retail floral outlets in the United States. Mass market floral outlets, mostly grocery stores, account for 17,000, but the majority (about 34,000) are independent retail floral shops.

These independent outlets accounted for an estimated $6.81 billion in 1986, or 82 percent of total retail sales, excluding nursery and greenhouse outlets. Although grocery store retail sales of flowers and plants were only $1.49 billion in 1986, or 18 percent of the total, floral sales averaged $28 per square foot per year, compared with $8-12 per square foot for other produce.

Grocery chains have discovered that consumers like the diversity and convenience of green plants, fresh cut flowers, and flowering potted plants in the produce section along with fruits and vegetables. Floral products are the fastest growing category in grocery stores and other mass markets.

World Trade Soars for Cut Flowers, Potted Plants

International trade in flowers and plants is extensive in both value and volume. A 1981 Dutch study showed that the annual world trade in ornamentals may have reached $20 billion. The study reported that world exports of cut flowers rose by more than 175 percent between 1973 and 1981, and total world exports of potted plants during the same period increased by at least 500 percent.

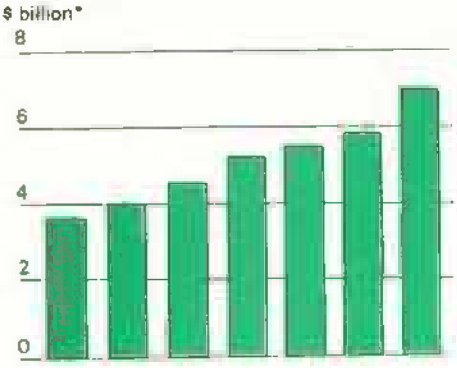
Holland is the world's largest exporter of floral products; West Germany is the largest importer. In 1981, only six countries—Holland, Colombia, Italy, Israel, Denmark, and Belgium—handled 90 percent of flower and plant exports. But export sources are broadening dramatically in the 1980's.

U.S. Consumers Buy Most Domestic Flower & Plant Production

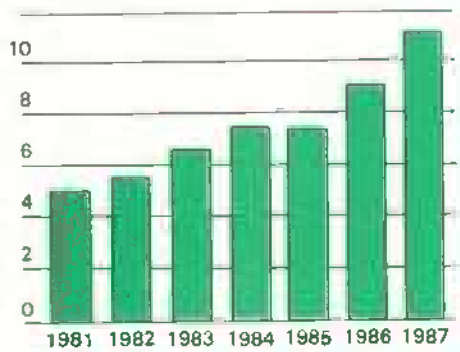
The United States is the world's largest producer of flowers and plants. It is a major importer and a minor exporter.

In 1987, the United States imported $244 million of fresh cut flowers and an additional $142 million in nursery products. Both categories have seen substantial growth in domestic production, imports, and sales during the past decade.

Greenhouse and Nursery Sales Growth. . .

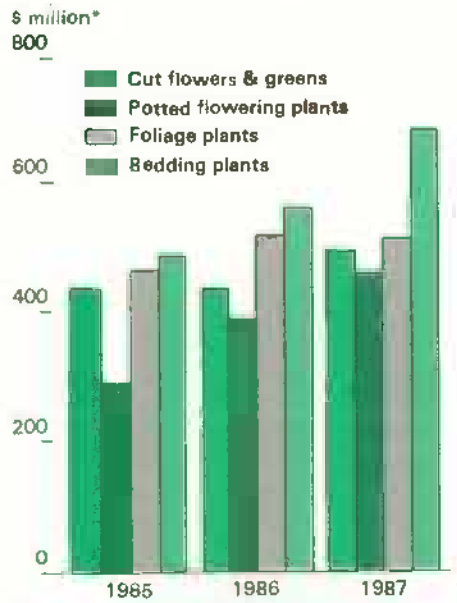


. . .Spells Bigger Share of Receipts From All Crops



*Farm value; excludes food crops grown under cover.

U.S. Floriculture Flourishes



*Grower sales, equivalent wholesale value for 28 crops.

U.S. Production, Supply, & Consumption of Greenhouse & Nursery Products

Subsector & year	Wholesale value of domestic production	Value of imports	Total supply	Value of exports	Consumption: Total	Consumption: Per capita	Change from prev. year	U.S. share of domestic market
	$ 1,000					$	Percent	Percent
Cut flowers								
1987	406,555	243,609	650,164	17,985	632,179	26.03	9.6	64.3
1986	359,826	234,895	594,721	18,164	576,557	23.97	0.9	62.4
1985	371,509	220,870	592,379	21,068	571,311	23.98	n/a	65.0
Other nursery-ornamentals 1/								
1987	6,570,130	132,335	6,702,465	49,168	6,653,297	274.00	19.9	98.7
1986	5,435,178	157,330	5,592,508	44,306	5,548,202	230.66	7.0	98.0
1985	5,115,471	104,020	5,219,491	34,197	5,185,294	217.68	n/a	98.7
Total ornamental-nursery 2/								
1987	6,976,685	375,944	7,352,629	67,153	7,285,476	300.03	19.0	95.8
1986	5,795,004	392,225	6,187,229	62,470	6,124,759	254.63	6.4	94.6
1985	5,486,980	324,890	5,811,870	55,265	5,756,605	241.66	n/a	95.3

1/ Includes foliage and potted flowering plants, bedding plants, decorative greens, bulbs, woody ornamentals, and other nursery stock. 2/ 1987 preliminary estimate.

Ornamental markets and trade are changing rapidly in response to exchange rate differences. Although U.S. imports continue to rise, the rate of increase has slowed. Colombia remains the number-one country exporting to the United States.

U.S. growers' share of the domestic cut flower market had fallen to less than 65 percent in 1986, but it has increased during the last year. U.S. growers still control nearly 96 percent of all sales of ornamentals and nursery products in this country. Total exports of ornamentals from the United States in 1987 were valued at $67.2 million, excluding flower and vegetable seeds. About 75 percent of U.S. ornamental exports enter Canada.

Dollar's Slide Has Slowed U.S. Imports

Imports from developed countries, such as Holland, and some developing countries, such as Colombia, have fallen during the past 2 years, after peaking in 1985. Until 1985, U.S. importers were able to obtain foreign products at comparatively low cost as the dollar gained buying power against other currencies. But for the past 2 years, the dollar's buying power has fallen to a postwar low, and freight costs paid by foreign suppliers have risen.

Despite the less expensive American dollar, Dutch flower exports to the United States have grown from $5 million annually in 1981 to $100 million, according to the Floral Council of Holland, which also shows a total of 203 million stems exported to the United States. The Dutch and other floral experts refer to the United States as "the largest underdeveloped market in the world for flowers."

The cost of Dutch cut flowers and tulips to U.S. importers has nearly doubled during the past several years. Consequently, the Dutch have shifted their exports to the EC and the Far East.

The United States still imports large volumes of cut flowers, foliage plants, and tulip bulbs (over 200 different varieties) from Holland and other countries. But domestic production of both traditional and nontraditional crops is increasing.

Since the Colombian peso is tied to the U.S. dollar, fluctuation in exchange rates did not affect trade. In 1981, Colombia supplied nearly 75 percent of the U.S. imports of cut flowers, but by 1987 this share had fallen to 57 percent, as U.S. import sources diversified. Nevertheless, Colombia will continue to be a dominant supplier of floral products to the United States.

The EC is growing more lucrative to South American growers. For example, in January, South American carnations exported to Holland sold at auction for 30 cents a stem, but in the United States they brought only 6-7 cents a stem.

International Production & Trade Expanding, Diversifying

The less expensive dollar helped U.S. growers to find export markets, but stiff competition will continue as other countries gear up their floriculture production for export. These include: in Africa, Zimbabwe, Kenya, and South Africa; in the Far East and Pacific Rim, Thailand, Singapore, New Zealand, and Australia; in the EC, France, Italy, and Spain; and, in the Middle East, Israel.

Large increases are also expected from Mexico, other Central and South American nations, and Caribbean Basin countries. Canada, too, is expected to raise production and is interested in stepping up exports to the United States.

The United States is likely to see not only larger imports of the major floral crops (carnations, roses, chrysanthemums, statice, gypsophlia, chamadorea, lilies, gladioli, freesia, alstroemeria, and daisies) but also a wider diversity of tropical crops (Bird of Paradise, Red Ginger, Heliconia, orchids, callas, anthuriums, and proteas).

U.S. growers have recently begun producing tulips, alstroemeria, gerberas, lilies, daffodils, tropical foliage, bulbs, and other ornamentals typically supplied by foreign countries. Since exchange rates are favorable and trade agreements may improve, U.S. growers are diversifying their export markets. At the same time, the U.S. ornamental industry continues to compete on price, quality, and consistency of supply. *[Doyle C. Johnson (202) 786-1884]*

Competitors' Grain Crops To Change Little

Foreign grain production excluding rice is forecast up 3 percent in 1988/89, led by increases in Europe and the Soviet Union. However, among the major exporters competing with the United States, smaller gains in grain area and production are projected. Total area and production of competitor wheat and coarse grains are expected to climb less than 2 percent, remaining below the levels of the early 1980's.

Early crop projections are subject to considerable change during the year. Revisions are especially likely for crops in the Southern Hemisphere. Concerns about hot and dry weather in the United States and Canada and the recent runup in prices may have influenced Southern Hemisphere farmers' planting decisions, which are made in May and June. Nevertheless, among the individual competitors, only a few large adjustments in area or production are now projected, and the changes tend to offset each other.

Global grain production excluding rice is projected to rise 3 percent in 1988/89. As in 1987/88, global consumption is forecast to exceed production, resulting in further stock drawdowns; total grain supplies are again expected to fall. World wheat and coarse grain carryin stocks are forecast 13 percent lower than in 1987/88 and are projected to decline another 10 percent by the end of 1988/89.

Wheat Market Has Tightened More Than Coarse Grain

This projected tightening of grain supplies is more pronounced for wheat than for coarse grains. A small increase in competitor area is not surprising for coarse grains, but early projections of only a small response by wheat competitors to a more favorable market are somewhat puzzling.

The recent low point in grain trade occurred in 1985/86. Since then, wheat trade has recovered substantially, with 1987/88 falling only 3 million tons short of the record.

In the face of solid demand, and with shortages of high-quality milling wheat, prices have increased significantly in recent months. Continued strong import demand, combined with dry weather in the United States and a decline in U.S. and competitor supplies, is expected to lead to higher export prices during 1988/89.

Increased wheat production in several major importing countries, especially the Soviet Union, together with reduced competitor supplies and higher prices, may result in a 3-percent decline in 1988/89 world wheat trade, to 101 million tons (excluding intra-EC trade).

Unlike wheat, coarse grain trade has been flat since 1985/86. Financial constraints, some substitution of feed wheat for coarse grains, and large crops and slow expansion of livestock production in many importing countries have contained growth.

Compared with wheat, coarse grain stocks are abundant. However, prices strengthened during 1987/88, mainly reflecting shortfalls in competitor corn supplies. For 1988/89, coarse grain prices are unlikely to change as much as wheat, while world coarse grain trade is forecast to increase nearly 4 percent to 86 million tons.

Price Formulas Dampen Incentives to Farmers

Why have most competitors' responses to improved grain prices been muted? The reasons are, first, administered price schemes that partly insulate farmers from both upward and downward movements in world prices and, second, more attractive prices for other crops.

Government price programs are the norm for most competitors; often these are based on averages that smooth out large price changes. The one unfettered price system among the major competing grain producers is in Thailand; the Argentine market is only relatively free.

In the EC, the Common Agricultural Policy shields farmers from the world market. Internal policies have a much greater impact than world price shifts.

Because of low world prices and exchange rate movements, EC budget costs have risen and contributed to some cuts in real prices to farmers. Early in 1988, the EC passed a policy reform package that included a limited system of price "stabilizers." These may cut cereal support prices by 3 percent in the next marketing year if production exceeds a threshold. Also included in the EC package is a set-aside scheme and an additional producer co-responsibility tax.

Nevertheless, no immediate impact on EC output seems likely from these measures.

Major Competitors' Grain Production

	1986/87	1987/88p	1988/89f
	Million metric tons		
Wheat			
Argentina	8.9	10.0	10.0
Australia	16.2	12.1	13.0
Canada	31.4	26.3	25.4
EC	71.9	71.2	74.9
Total	128.4	119.7	123.3
Coarse grains			
Argentina	13.0	13.0	13.2
Australia	6.6	6.8	7.8
Canada	25.5	26.0	22.2
EC	81.3	82.2	85.3
South Africa	7.9	8.3	8.9
Thailand	4.6	3.0	5.1
Total	138.9	139.3	142.4

p = preliminary. f = forecast.

In some cases, prices for oilseeds and pulses have been sufficiently high to keep competitors' area out of grains. For example, barley area in Canada is expected to fall 15 percent in 1988/89, with most of the reduction going into rapeseed.

There was a large shift from corn to soybeans in Argentina in 1987/88 because of price movements favoring soybeans. The outlook for Argentina's 1988/89 corn crop hinges largely on price relationships at the time of planting. Similarly, record prices for wool have led to increases in the Australian sheep flock and have apparently reduced interest in wheat despite the recent wheat price increase.

The only strong increase in producer prices among the competitors in recent months has occurred in Thailand. Corn prices there have soared because of low supplies and strong demand. Prices are high enough to attract back to corn some land that had been planted to cassava or soybeans last year, and to stimulate more input use.

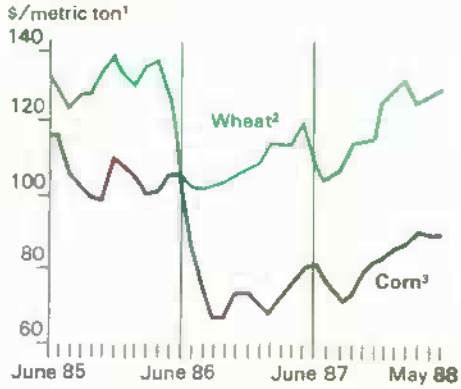
Competitors' Wheat Production Rising Only Marginally

Wheat area in the major competing countries is forecast to rise by less than 1 percent in 1988/89. While expectations of higher prices in Australia and Argentina may bring some wheat area back into production, wet autumn weather in the EC prevented some winter wheat from being planted. Assuming average yields in Argentina and Australia and improved yields in the EC, competitor production is forecast at 123.3 million tons, only 3 percent above 1987/88.

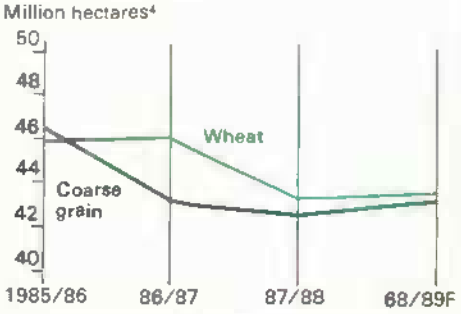
Farmers in Australia are expected to boost wheat area by 4 percent, to 9.5 million hectares. However, the prices of wool and legumes may still be high enough to discourage the farmers who shifted 2.2 million hectares out of wheat in 1987/88 from bringing much of it back.

Price increases may encourage producers in Argentina to expand wheat area to at least 5.3 million hectares, 8 percent above 1987/88. However, should yields drop back to normal, production there is not expected to exceed 1987/88.

Recent Rise in Grain Export Prices. . .



. . .Has Not Made U.S. Competitors Expand Grain Area



¹Monthly average price, f.o.b. Gulf Ports ²Hard Red Winter Wheat No. 2. ³No. 3 yellow corn. ⁴Excluding rice. Major competitors for wheat are Canada, EC, Australia, & Argentina; for coarse grains, Argentina, Australia, EC, South Africa, & Thailand. F=forecast

Canada's wheat area is projected to decline marginally to 13.4 million hectares. The Canadian Wheat Board announced that the payment for the 1987/88 crop would be increased by 9 percent, and then announced that the 1988/89 price would equal the adjusted 1987/88 price. However, the higher price is not expected to be enough to bring back area taken out of wheat last season. In addition, continued dry weather in the prairie is causing some concern about the condition of Canada's spring wheat.

Wet conditions in the autumn prevented planting some EC wheat area, particularly in Italy and the United Kingdom. Total EC wheat area is forecast to decline 2 percent to 15.6 million hectares, but yields are expected to be higher than in 1987/88. However, summer and harvest weather can still strongly influence the crop.

Rebound in Corn Will Raise Competitors' Coarse Grains Slightly

Total coarse grain production in 1988/89 for the major foreign exporters is projected to increase only 2 percent, with area also up 2 percent. Competitors' corn output is projected to rise most significantly. Excluding the EC, where no change is anticipated, the corn outturn could be up 14 percent over 1987/88. Smaller increases are likely for competitors' barley and sorghum output.

The most dramatic change among the coarse grain competitors is likely in Thailand, where a poor monsoon hurt the 1987/88 corn crop and area planted was already down because of low prices. In 1988/89, Thai corn production is projected to jump more than 75 percent, to 4.8 million tons. This will enable Thailand to recapture some of its traditional export markets.

An increase in corn production is also projected for South Africa, despite its policy of diversifying away from corn exports in the face of low world prices. Area is expected to increase and production could expand by 500,000 tons to 8 million. A drop in South Africa's 1987/88 corn area—to the lowest in recent decades—was due to poor planting conditions, as well as to the diversification program and high wheat prices.

Argentina's coarse grain output is projected about the same as in 1987/88, although area may rise 4 percent. An average Argentine growing season could mean more abandonment in 1988/89, offsetting some of the likely increase in plantings, while yields are not expected to match 1987/88. Last season, with excellent conditions and high yields, there was below-average abandonment.

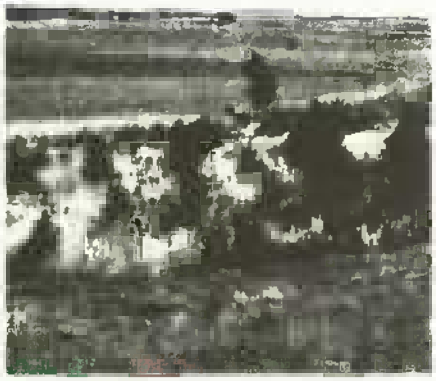
Although not usually categorized as a major exporter, Eastern Europe is projected to have a large rebound in corn production that will allow for higher exports and lower imports. An increase of 6 million tons of corn is possible, assuming a recovery of yields after poor weather in 1987/88. An area increase is expected in Yugoslavia, where free market prices have been strong because of tight supplies.

A small drop in China's corn crop to 76 million tons is projected in 1988/89, with area falling 3 percent. Following the bumper crop of 1987 and a slowing in the growth rate of feed demand, free market corn prices stagnated or declined.

Competitor barley production is likely to show little change, rising less than 1 percent from the previous year. A sharp drop projected for Canada is more than balanced by increases for the EC and Australia.

Given lower prospective area and assuming normal yields, Canada's barley crop is forecast to fall 3 million tons to 11.3 million. But a gain of 3 million tons is projected for EC barley. Most of it is attributed to continued strong growth in yields and to better crops in Spain, the UK, and Denmark. In Australia, prices for malting and feed barley have improved and a slight increase in area is forecast. Average yields could boost barley output by over 10 percent, or 400,000 tons.

The outlook for sorghum production is for increases in each of the major competitors. Farmers in Australia are realizing better prices for both sorghum and oats; this is expected to boost planting and production. No significant shifts in sorghum area are projected for either Argentina or Thailand, but production in both countries is forecast to be up slightly. *[Pete Riley and Sara Schwartz (202) 786-1825]*



Resources

CHANGES AFFECT SEVENTH CRP SIGNUP

The seventh signup for the Conservation Reserve Program (CRP) is scheduled for July 18-August 5. During the sixth signup, held in February, USDA received bids for approximately 4.5 million acres for the 10-year cropland retirement program.

However, cropland contracts resulting from the sixth signup amounted to 3.4 million acres, bringing total CRP enrollment to 25.5 million acres. To farmers who place highly erodible cropland into the CRP, USDA pays an annual rental fee and defrays up to half of the cost of establishing a permanent cover, usually grass or trees.

Following the fifth signup, 60 percent of CRP enrollment was concentrated in the Northern Plains, Southern Plains, and Mountain States, although these regions accounted for only 45 percent of eligible land nationally. The Corn Belt, which contained approximately 24 percent of the nation's eligible land, accounted for only 14 percent of enrollment.

In part to modify this imbalance, USDA made program changes with the sixth signup. These important changes in eligibility, rental rates, and bid acceptance will continue to influence bidding in the next signup.

Tree-Cover Eligibility Increased Significantly

Changes made before the sixth signup have increased the amount of land eligible for the CRP. To encourage tree planting, acres with lower erosion levels (from 3T to 2T, where T is the normal soil-loss tolerance level) were made eligible for tree cover.

A second change was made in the qualifications for tree cover. Formerly, to enroll a field for tree planting, at least two-thirds of the field had to be classified highly erodible. Beginning with the sixth signup, however, only one-third of the field had to be highly erodible to qualify.

Together, these changes resulted in significant increases in acres bid for tree planting last February. Interest was especially strong in the South; area bid for tree planting accounted for 94 percent of total acres bid in Georgia and Florida, and 89 percent in South Carolina.

To reduce water quality degradation from surface runoff, filter strips were designated as an approved CRP conservation practice. Filter strips may be placed on 66-99 foot wide areas of cropland adjacent to streams, lakes, estuaries, and other permanent bodies of water, regardless of land class, current erosion, or erosion potential.

Bid Acceptance Changes Will Influence Seventh Signup

Following the sixth signup, USDA Maximum Acceptable Rental Rates, or MARR's, were increased for 27 bid areas, or pools; counties are grouped by land characteristics into pools. These pools were located primarily in the Corn Belt, Wisconsin, and the Chesapeake Bay drainage area. Three new bid pools with higher maximums were also created by partitioning existing pools in Pennsylvania (one new pool) and Virginia (two new pools).

The largest dollar increases in MARR's, $25 per acre, were conferred on two pools in Illinois, while the greatest percentage increase (40 percent) occurred for a pool in Virginia. Since these increases were not known to farmers prior

to the February signup, they had little effect then. But, they could stimulate greater participation in these areas during the upcoming signup.

The fiscal 1988 Continuing Budget Resolution (P.L. 100-233) requires that CRP rental payments not exceed prevailing local cash rental rates. Thus, county ASC committees reviewed USDA-established maximum rates beginning with the sixth signup.

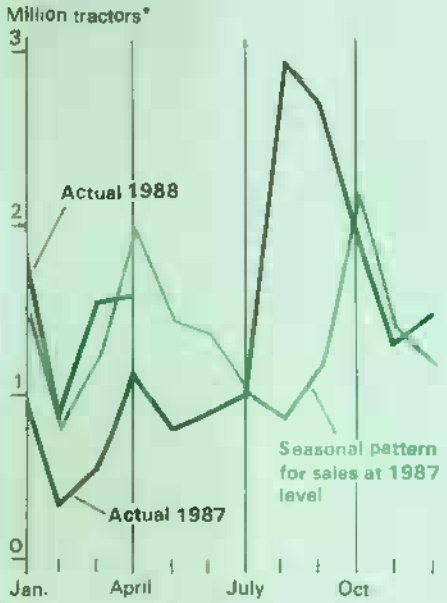
If a MARR exceeded average county cash rental rates, the committee was authorized to reduce it. Committees for 325 counties (approximately 10 percent of U.S. counties) deemed the MARR's there too high and lowered them.

However, since MARR's had been raised after the sixth signup in the Corn Belt and Chesapeake Bay regions, the reduction meant that only 108 counties experienced a net MARR decrease from the rates in effect for the fifth signup.

Machinery Sales See Surge, But It's Probably Temporary

Sales of farm machinery increased markedly in July 1987-May 1988. Sales of 2-wheel-drive tractors of over-99 horsepower (hp), 4-wheel-drive tractors, and combines increased by 113, 22, and 22 percent, respectively, compared with the same 10 months a year earlier.

Monthly Tractor Sales Returning to Seasonal Pattern This Year



*100-plus hp two-wheel-drive tractors

This increase was mainly driven by significant price cuts instituted by manufacturers to reduce inventories or maintain market share. The most significant price cutting began in the latter half of 1987.

Without these sales incentives, there would have been a more modest increase in sales. Furthermore, because the percentage increases in sales are based on the depressed rates of recent years, the measures can be misleading.

Still, there has been enough improvement in the farm economy so that, even without additional incentives, sales of new machinery in 1988 are expected to be above 1987.

The divergence from seasonal sales patterns suggests that sales incentives are responsible for the surge. In late July 1987, over-99 hp 2-wheel-drive sales began to climb. The 113-percent increase in volume resulted mainly from price reductions of up to 60 percent. Unit sales of 4-wheel-drive tractors and combines in 1987 followed normal seasonal patterns and showed no significant change from 1986. However, January-April 1988 sales of 4-wheel-drive tractors and combines were 94 and 226 percent higher, respectively, than the same period last year.

Again, high percentage increases in sales of some units do not indicate that demand is strong. Sales of larger machines in the first 4 months of this year represent less than one-third of the same period's 1975-79 average.

A number of farm financial indicators suggest why the demand for new machinery shows some improvement yet remains weak. Although no recent data are available, the stock of machinery on farms is growing older, and dealer inventories of used equipment are apparently lower than normal.

A record $56 billion in net cash income for 1987 helped improve farm financial conditions. Net cash income in 1988 is expected to maintain the 1987 level. However, the same Government programs which removed 47 million acres of cropland from production by 1986 removed an additional 29 million in 1987, and are expected to remove 4 million more in 1988, further decreasing farm machinery use.

The 1986 Tax Reform Act eliminated the investment tax credit, raising the after-tax cost of farm machinery investments. Although real (inflation-adjusted) interest rates have edged downward, they remain high by historical standards. Agricultural land values increased by 3 percent from February 1987 to February 1988, but when measured with inflation-adjusted dollars they show a 1-percent drop. *[LeRoy Hansen (202) 786-1456]*

Measures of Farm Machinery Sales

	7/86 - 4/87	7/87 - 4/88	Change	1/87 - 4/87	1/88 - 4/88	Change	1/86 - 4/86	1/87 - 4/87	1/88 - 4/88
	-----Units-----		Percent	-----Units-----		Percent	Percent of Jan.-Apr. 1975-79 ------average sales-------		
Tractors									
2-wheel-drive*	7,962	17,000	113	2,985	5,706	91	22	12	23
4-wheel-drive	1,571	1,911	22	483	935	94	22	16	31
Combines	6,380	7,783	22	485	1,583	226	24	10	32
Forage harvesters	1,873	1,759	-6.1	351	358	2.0	21	27	28
Balers	3,993	3,621	-9.3	863	1,016	18	33	28	32
Mower conditioners	7,254	6,938	-4.4	1,856	2,174	17	56	52	71

Source: Farm and Industrial Equipment Institute.

*Over-99 horsepower.

Net reductions ranged from as much as $30 to only 2 cents per acre, with 48 percent of these county committees calling for a net reduction of $10 per acre or more. County committees are responsible for reviewing bids to ensure that they do not exceed prevailing cash rents for comparable cropland. *[Tim Osborn (202) 786-1434]*

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the August *Agricultural Outlook* comes off press.

July

1 Egg Products
Poultry Slaughter
6 Dairy Products
7 Celery
11 Noncitrus Fruits & Nuts-Midyear Supplement
12 Crop Production
13 Turkey Hatchery
15 Mink
Milk Production
18 Vegetables
19 Farm Prod. Expenditures, 1987 Summary-Final
20 Catfish
22 Cattle on Feed
Livestock Slaughter
Cold Storage
25 Eggs, Chickens, & Turkeys
28 Peanut Stocks & Processing
29 Cattle
Agricultural Prices

Farm Finance

INCOME PROJECTED STABLE IN 1988

The forecast range for farmers' 1988 net cash income was raised to reflect early June data, but it does not yet reflect potential impacts of the drought on production. Indicated net cash income is $53-$59 billion, about in line with 1987. Net farm income is projected at $42 to $48 billion, compared with $46 billion last year.

Record or near-record livestock receipts and a $4- to $6-billion rise in crop receipts may be offset by lower direct Federal payments and higher production expenses. Because of the drought, income returns for individual farmers may vary widely from what they would have been with normal rainfall.

Early dry conditions in the major corn, soybean, and wheat producing regions introduce a large degree of uncertainty into crop receipt estimates. Spring-planted crops are under stress from above-normal temperatures and below-average rainfall in many areas. Commodity markets are responding with upward pressure on crop prices. (See "Drought Conditions in Mid-June" on page 2 for more information.)

Progress is expected again this year in the sector's balance sheet. Farm debt may fall to $132-$142 billion from a high of nearly $193 billion in 1983. Farm assets are projected to rise again after bottoming out in 1986. Increased assets and lower debts should spur farm equity to the highest since 1984.

Income stability and continued financial gains are occurring this year despite lower direct Federal subsidies and higher production expenditures. The farm financial recovery is supported by several economic adjustments:

- Wheat, rice, corn, and soybean stocks are projected down an average of 22 percent. Tighter supplies are prompting higher prices and improved earnings for the crop sector.
- A 4-percent gain in cattle prices, near-record cattle sales, and continued pork and poultry expansions may hold livestock receipts near last year's record $75 billion.
- With higher crop prices, reliance on the CCC for price supports during the remainder of 1988 should be virtually eliminated. The open market will then account for all sales of program commodities.
- Federal payments, forecast to decline 15 to 20 percent as market conditions improve, nevertheless may add $12 to $14 billion to gross farm earnings, the second highest on record.
- Interest expenses may fall to $13-$15 billion, down from over $21 billion just 4 years ago, as debts are paid off. This would mark the fifth straight year of debt reduction.
- A 2- to 4-percent rise in nominal land values and higher valued livestock inventories may boost equity by $20 to $30 billion in 1988

Higher Crop Earnings Support Recovery

Projected to rise 5 to 11 percent, crop receipts may reach $64 to $68 billion, reversing 2 successive years of decline. This is a turnaround; in the last few years, rising livestock earnings and CCC

price and income support programs shored up farm income and supported the financial recovery despite lower crop earnings.

Soybean receipts are projected up more than other commodities, led by 15- to 20-percent higher prices. Weather concerns have strengthened prices, with parts of the country experiencing the driest spring in 50 years. Stable acreage and a one-third reduction in stocks are also supporting soybean revenues.

Food grains are expected to add $1.0 to $1.5 billion to 1988 receipts, with wheat prices averaging 15- to 30-percent higher. Larger exports and dwindling stocks are strengthening wheat prices. Beginning wheat stocks are expected to be one-third below a year ago, while rice stocks may drop around 40 percent.

Following low net loan placements for all crops last year, withdrawals of CCC stocks are forecast to exceed placements in calendar 1988. In contrast, combined 1985 and 1986 placements totaled $20 billion, making up one-fourth of commodity program cash receipts each year.

Federal Supports Lower As Crop Price Outlook Improves

After reaching a record $17 billion in 1987, direct Federal payments are projected to decline to $12 to $14 billion this year. Two- to 4-percent lower support levels, higher market prices, and a 3.6-percent decline in eligible acreage enrolled in Federal programs underlie this decline.

A $2- to $4-billion reduction in certificate issuances and lower cash deficiency payments account for the bulk of the expected decline in direct Government outlays. Even though lower, direct payments will retain a significant role in farmers' income and financial recovery.

Near-Record Livestock Receipts Expected

Total livestock receipts are projected to be slightly above last year's record $75 billion. They are forecast to rise $200 to $400 million, with price gains outweighing a 2- to 3-percent decline in production. Forecast at $34 to $35 billion, cattle and calf receipts could just miss the 1979 record of $35 billion. Poultry receipts may provide an additional $500 to $700 million, with production gains outpacing softer prices.

However, hog and dairy sales are likely to decline, keeping total livestock receipts essentially unchanged. After playing a key role in supporting 1986 and 1987 farm income, hog receipts are projected to slip $.5 to $1 billion from last year. This outlook is driven by an expected hog price decline of $5 to $6 per cwt, offsetting anticipated growth of 5 to 6 percent in production.

Dairy operations likely will realize lower earnings; the 1988 support price was reduced 50 cents per cwt in response to near-record output.

Gross Earnings on the Rise Despite Reduced Federal Role

Gross farm income in 1988 may slightly exceed the year-earlier level. At $168 to $173 billion, gross income could be second only to the 1984 record, established in the wake of the 1983 PIK and drought year.

Although slight, this year's gain in farm earnings is important, given an anticipated $1- to $3-billion rise in production costs and a $3- to $5-billion decline in direct Federal supports. Federal payments as a share of gross income are projected to fall from a high of 10 percent in 1987 to 8 percent, as market prices for program commodities improve and livestock earnings remain strong.

Operating Costs Likely To Climb

The production expense outlook is for a $1- to $3-billion rise, following sharp declines in 1985 and 1986 and a modest increase last year. Items likely to raise this year's costs the most include feed, fertilizer, and feeder livestock.

With feed grain prices projected to continue up in 1988, livestock operators will shoulder higher costs. Feed costs are expected to rise nearly $2 billion, more than any other expense item. Impacts will be strongest in the Corn Belt, Pacific, and Lake States, reflecting the concentration of beef, hog, and dairy production.

Fertilizer prices this spring rose 10 percent over a year earlier, implying higher production costs for corn producers. Higher prices, reductions in corn and sorghum voluntary paid land diversion requirements, and lower acreage reduction requirements for rice and cotton could increase fertilizer expenditures by 10 to 12 percent.

The Corn Belt, which typically accounts for around 30 percent of total fertilizer expenditures, is the region most affected by higher fertilizer prices. *[Richard Kodl (202) 786-1808]*

JACKSON FLB IN RECEIVERSHIP

On May 20, the Jackson Federal Land Bank complex, with its 90 Federal Land Bank Associations, was placed in receivership. This is the first time in the history of the Farm Credit System that any of its institutions have been closed.

The Jackson district covers Alabama, Louisiana, and Mississippi. Serving 2,200 customers and holding $2 billion in assets at the time of closing, it was the third smallest of the 12 Federal Land Banks (FLB's).

The Jackson bank's aggressive lending policies in the late 1970's and early 1980's and poor loan servicing are said to be the principal causes of its woes. In the past few years, the bank has been reluctant to foreclose on its farmer-borrowers.

There have been some allegations that many farmers who are in sound enough financial shape to continue making their payments have stopped in the hopes of a more favorable restructuring. Under the borrower rights provision of the 1987 Agricultural Credit Act, the amount of income "over and above necessary and reasonable living and operating expenses" must be used to repay primary obligations.

Questions arise over what is "necessary and reasonable." The banks are required to restructure the loans if the cost of restructuring is less than the cost of foreclosure.

The Jackson bank had been precluded since December 1987 from issuing bonds and making new loans because of its negative capital position and collateral deficiency. The bank reported a $44.3-million loss for last year, despite improved farm conditions, and had been losing an average of $4.7 million a month during 1988.

40 Percent of Loans In Difficulty

Roughly 40 percent of its loans were in nonaccrual status (90 days delinquent and with insufficient collateral) or in high-risk status (either 90 days delinquent but with sufficient collateral, or loans requiring abnormal servicing).

The Farm Credit Administration, the Farm Credit System's regulator, estimated the Jackson bank would need at least $300 million, in addition to the $30 million already provided this year, to regain its financial footing. The Farm Credit Administration decided the bank was unlikely to be able to repay that much capital within the 15 years required by the Agricultural Credit Act of 1987.

System officials were reported to be surprised at the Jackson bank liquidation. A merger between the bank and another solvent institution had been presumed, but no system institution was willing to assume the Jackson bank's portfolio, even with a pledge of financial assistance.

The Jackson bank's assets include $94.6 million of outstanding borrower stock protected by the Agricultural Credit Act of 1987. The Assistance Board, created by the 1987 act to oversee assistance to Farm Credit System institutions, has agreed to provide the receiver with $2 million to retire the stock of the 758 borrowers who have fully repaid their loans.

Arrangements have been made with the Columbia and Texas FLB's to provide interim full credit services to the three States affected by the Jackson bank closing.

The receiver, REW Enterprises, will sell the bank's assets and pay as many debts as possible. Some losses are expected. Good loans are expected to be sold to other system banks and bad loans restructured or foreclosed according to the 1987 act's borrower rights provisions.

Investors in Farm Credit System bonds were assured by the Assistance Board that the other FLB's would not be immediately liable for the Jackson bank's obligations, although the other banks will ultimately repay the funds. For now, these funds come from the $4 billion provided for by the 1987 act.

No Credit Shortage Likely

The Jackson bank's failure likely will speed restructuring and foreclosure for many of its loans that are in default. But, the failure is unlikely to result in a credit shortage to qualified borrowers in the Jackson district. Holders of borrower stock will be able to redeem their stock at par, in accordance with the 1987 legislation, at the expense of other Farm Credit System institutions. This expense will not be felt, however, until the bailout loan is actually paid back.

Several other FLB's reported that they do not have enough capital left to cover borrower stock, and some petitioned the Assistance Board for help. On the same day the Jackson FLB was closed, the Louisville FLB received $90 million in aid. The Louisville bank, which lost $29.7 million last year, reported a 35-percent impairment of borrower stock. The Louisville bank is the fifth smallest FLB and serves Kentucky, Indiana, Ohio, and Tennessee.

An interesting stipulation of the Louisville aid is the requirement that Land Bank Associations of the district make loans at market rates. Many analysts have noted the tendency for financial institutions to make riskier loans as they approach insolvency. The Louisville requirement is designed to prevent such risky loans.

The insurance safety nets now in place minimize risk to the financial system as a whole by minimizing the loss associated with bankruptcy; the protections have the unintended effect of encouraging the institutions to risk more when they have less equity to lose. Last April, both the American Bankers Association and the Farm Credit Administration protested alleged undercutting of market loan rates by Farm Credit System institutions.

In testimony before Congress, Farm Credit System officials refuted this claim, and cited an urgent need to regain market share that has now dropped by $30 billion in the past 4 years.

Two other FLB's, St. Paul and Omaha, have requested assistance. St. Paul, with $5.6 billion in assets, is the largest Federal Land Bank and association complex and reported a $36.1-million loss for 1987. It is asking for $128 million and is expected to get it.

Omaha, the fourth largest, lost $109.6 million. The Omaha Land Bank later withdrew its request for assistance. A planned merger with the Omaha Federal Intermediate Credit Bank will bring the capital up to an operationally viable level. *[Merritt Hughes (202) 786-1892]*

Upcoming Economic Reports

Summary Released	Title
July	
12	World Ag. Supply & Demand
13	Livestock & Poultry
19	Dairy
20	Agricultural Outlook
21	Oil Crops Yearbook
28	Agricultural Resources
29	World Food Needs & Availabilities
	National Food Review

World Agriculture & Trade

WHAT EXPLAINS WHEAT EXPORT RISE?

U.S. wheat export volume has improved considerably since implementation of the Food Security Act of 1985. U.S. stocks have been pulled down and wheat that was once in or headed for Government storage has been exported instead, at more competitive prices.

The Food Security Act of 1985, according to an ERS model, accounts for nearly half of the increase in U.S. wheat exports since 1985/86. Implementation of the act has also resulted in higher EC spending for export subsidies. The model attributes most of the rest of the U.S. wheat export increase to factors that have expanded imports by the centrally planned economies—factors that are internal to these economies and are not related to U.S. programs or the world price.

Four Factors Caused Wheat Export Rise Since 1985

Over 95 percent of the expansion in actual/projected U.S. wheat exports during 1985/86-1988/89 is due to four factors: (1) the Export Enhancement Program, (2) the lower wheat loan rate, (3) reductions in competitor yields, and (4) increased imports by the Soviet Union, China, and Eastern Europe. The depreciation in the value of the U.S. dollar had only a small impact on U.S. wheat exports, according to the model.

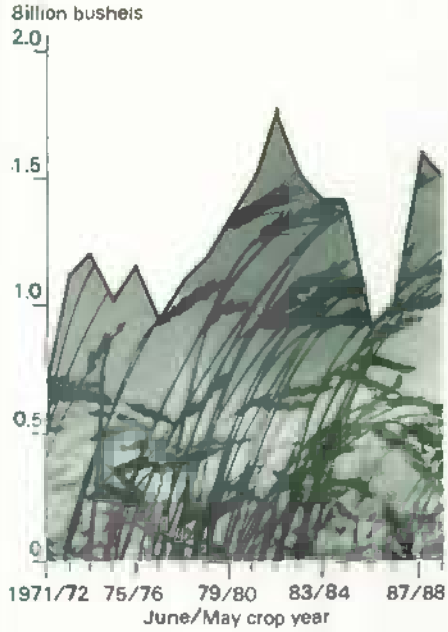
Suppose the 1985 act had not been implemented, competitor yields had not fallen, and imports by the centrally planned economies had not expanded. In that case, U.S. wheat exports would have fallen from 915 million bushels in 1985/86 to 650 million in 1986/87 and would subsequently expand to just 993 million by 1988/89. This is the low export scenario.

Even the low export scenario shows some rise since 1985/86, but this small rise is not addressed by the model. It is the market expansion between the low export scenario and actual/projected exports that is explained by the four factors in the model.

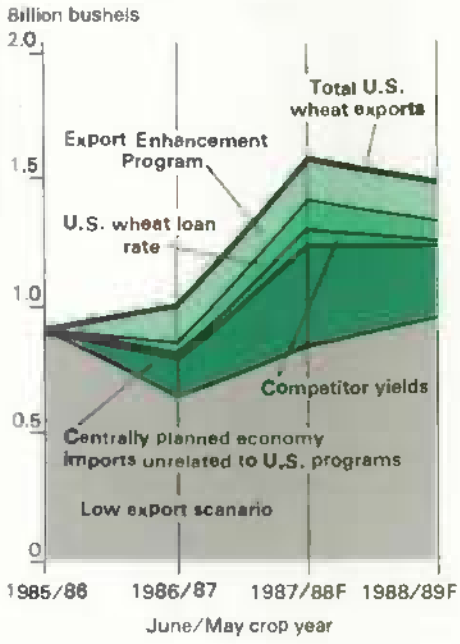
Half the Rise Due to The Centrally Planned Economies

Half the difference since 1985/86 between actual/projected exports and the low export scenario is due to an increase in imports by the USSR, China, and Eastern Europe aside from the EEP, and about a third is due to the EEP program. The model attributes the rest of the difference to the lower wheat loan rate and to lower competitor yields in 1987/88.

U.S. Wheat Exports Recover From 1985/86 Low



Four Factors Affect U.S. Wheat Exports



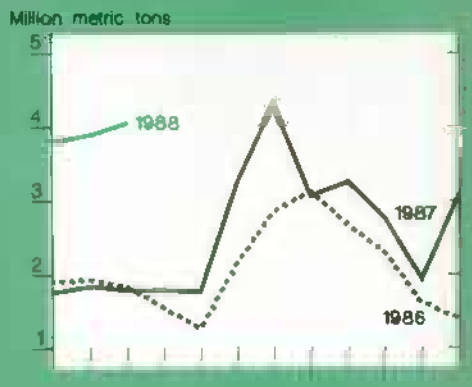
The centrally planned economies recently expanded wheat imports in response to internal inducements. The ERS model suggests this expansion lifted U.S. wheat exports 21 percent in 1986/87, 34 percent in 1987/88, and 24 percent in 1988/89 above what U.S. exports would have been without the import rise. That part of the increase in Soviet imports due to the EEP program is not reflected here, but rather in the EEP scenario.

In 1987/88, Soviet imports increased 5.5 million metric tons (mmt). The ERS model suggests that less than half of the Soviet increase is explained by lower USSR production, falling world wheat and crude oil prices, and the EEP program. The remainder of the increase is due to a poor quality Soviet crop and other factors. Imports of breadmaking-quality wheat were needed in 1987/88 to meet domestic food needs.

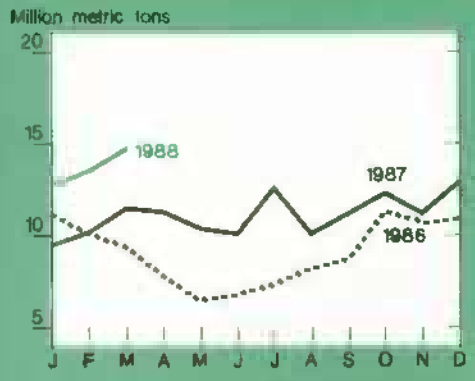
U.S. Agricultural Trade Indicators

U.S. agricultural trade balance

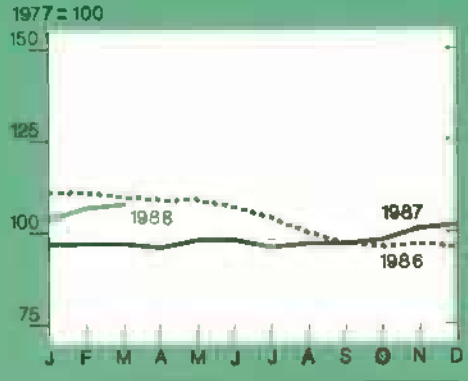
U.S. wheat exports



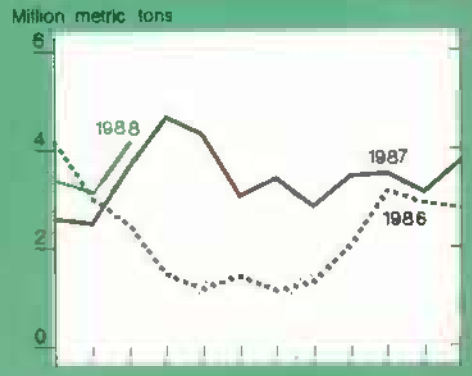
Export volume



Index of export prices

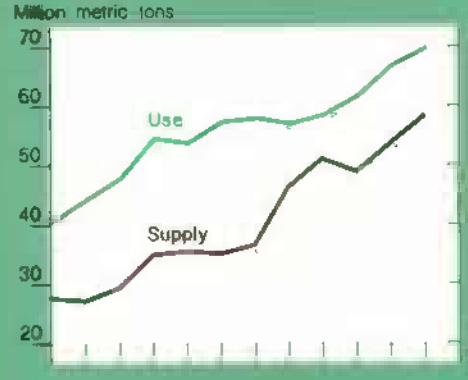


U.S. corn exports

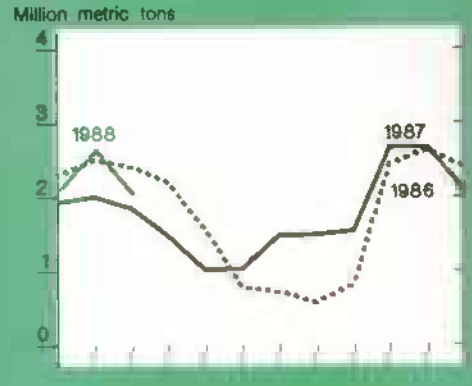


Foreign supply & use of coarse grains

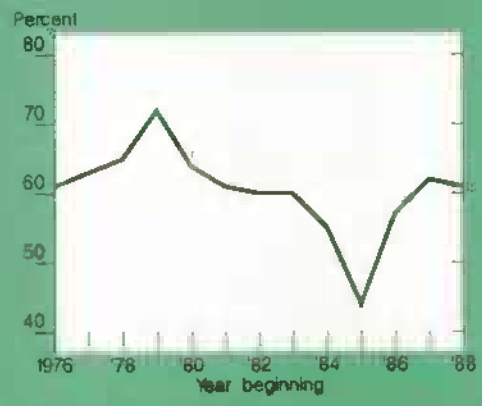
Foreign supply & use of soybeans



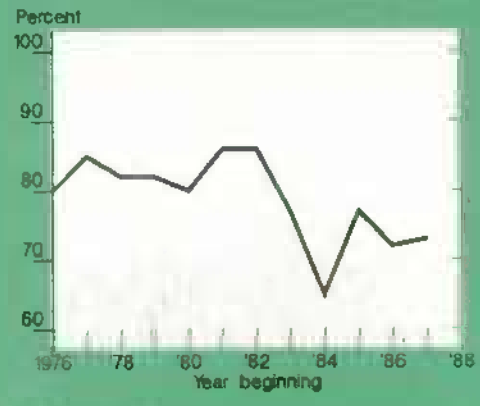
U.S. soybean exports



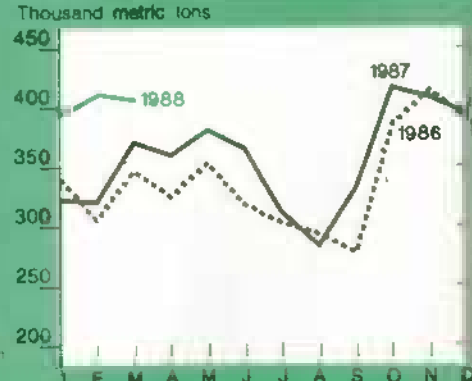
U.S. share of world coarse grains exports[1,2]



U.S. share of world soybean exports



U.S. fruit & vegetable exports[3]



[1]Excluding intra-EC trade. [2]October-September years [3]Includes fruit juices.

China's wheat imports increased from 6.6 mmt in 1985/86 to an estimated 13.5 mmt in 1987/88, and are expected to remain the same in 1988/89. This increase results from a growing population, rising incomes due to economic reforms, and sharply falling stocks. Bigger imports were needed to meet growing domestic demand for high-quality wheat and to maintain stocks.

China is an astute trader and is responsive to relative prices of competing suppliers once it determines its overall import volume. What is less clear, however, is the extent to which import volume has been affected by changes in the world price from one year to the next. Statistically, the responsiveness of China's overall import volume to annual changes in the world price was not found to be significant.

Even though its imports are not entirely market determined, China may have become more price responsive in recent years because of the EEP. So the EEP program could have been responsible for more than the one-third of the expansion in U.S. wheat exports that is estimated by this model. By the same token, internally determined imports by all the centrally planned economies could have been responsible for less than half of the U.S. wheat market expansion.

Net imports by Eastern Europe increased from 0.9 mmt in 1985/86 to 1.8 mmt in 1986/87 and fell marginally to 1.5 mmt in 1987/88. This increase comes from: (1) increased imports by Poland due to poor harvests and greater livestock feeding, (2) higher imports by Yugoslavia, which experienced poor weather and lower planted area, and (3) poor weather in Hungary and Bulgaria, which lowered their export volume. Imports may fall in 1988/89 if production improves in Eastern Europe.

Export Enhancement Program Is Second Major Boost

The EEP provides a bonus to exporters who sell to markets targeted by the CCC; the bonus is awarded on a competitive bid basis. Exporters can offer more competitive export prices knowing they may receive a bonus from the CCC in the form of a generic certificate.

Some importers have purchased under a combination of EEP and export credit guarantees such as GSM-102 and GSM-103. The major EEP markets since the program's inception have been the Soviet Union, North Africa, and China.

The effect of the EEP on the world wheat market has been to increase U.S. wheat exports and the U.S. share of world wheat trade, and to raise the cost of the EC's exporting surplus wheat. Although the model indicates that the EEP is responsible for one-third of the U.S. wheat export expansion, this estimate depends on how much of China's imports can be attributed to it. The U.S. market share in major importer markets has also increased with greater EEP expenditures.

For example, the U.S. share of the Soviet wheat market rose from almost nothing in 1985/86 to about 50 percent in 1987/88. The U.S. market share in North Africa increased from just 38 percent in 1984/85 to 56 percent in 1986/87.

Lower Wheat Loan Rate Also Helped

Loan rates for U.S. program crops were lowered under the 1985 act to make U.S. farm prices more competitive in international markets. In the face of falling farm prices, farm income was maintained by increased deficiency payments.

Both the EEP and lower loan rates reduce export prices. However, they affect both export supply and import demand differently. The EEP tends to draw down existing stocks for export to targeted importers, whereas lower loan rates tend to redirect production above domestic use away from stocks toward exports through price competitiveness.

The ERS model suggests that the lower wheat loan rates boosted U.S. wheat exports, marginally reduced area planted in major export competing countries, and substantially lowered U.S. ending stocks.

Over 1985/86-1988/89, planted areas in the EC, Canada, Australia, and Argentina fell 1 to 6 percent from what each would likely have been with a higher U.S. loan rate and thus a higher world price. Planting decisions in the EC are conditioned on expected EC market prices and are isolated from the world market. These expected prices are in turn conditioned on the EC's Common Agricultural Policy, which over the long run may be influenced by changes in the world price.

Canadian wheat area is relatively unresponsive to changes in the world price, because of large production subsidies and a lack of major alternatives to wheat production in the Prairie Provinces. Australia and Argentina have responded to lower world prices with significantly smaller area and are switching to alternative crops.

Under the lower loan rates, U.S. stocks were reduced to meet increased demand. The ERS model suggests ending stocks were 9 percent lower in 1986/87 than they would have been with a $3.30 loan rate, an estimated 26 percent lower in 1987/88, and will be 40 percent lower in 1988/89.

Retaining the higher loan and other program variables from the previous farm act probably would have meant a continuation of large crop forfeitures to the CCC. This would have maintained the farm price at the loan rate, but would have increased ending stocks and reduced exports.

Reductions in Competitors' Yields Lifted U.S. Exports Slightly

Wheat yields in the EC and Australia fell below 1985/86 in both 1986/87 and 1987/88. This reduced the exportable surplus for these two countries and thus increased the demand for U.S. wheat.

The model indicates, however, that lower competitor yields had a minor effect on U.S. wheat exports. U.S. exports over 1985/86-1988/89 increased just 1-4 percent from what probably would have occurred had competitor yields been better.

U.S. Dollar Depreciation Had Little Effect

Many analysts cite the U.S. dollar's appreciation relative to major trading partners as a reason for the loss of U.S. market shares in the early 1980's. The more expensive dollar coupled with a relatively high loan rate had made U.S. wheat export prices uncompetitive. Since then the dollar has become less expensive.

The decline in the value of the dollar has been considered a factor in expanding U.S. wheat exports, since the two occurred simultaneously. The analysis suggests, however, that the dollar's depreciation had little impact, for two reasons.

First, export competitors matched the lower U.S. wheat prices under the 1985 act, despite unfavorable changes in the exchange rate, in order to be competitive with the United States. The impact of lower export prices on producer returns has been offset by support prices and other producer subsidies.

Second, the world's largest importers—the centrally planned economies—are relatively unresponsive to exchange rates. To the extent that the countries are price responsive, their import decisions are influenced by the relative prices of exporters in their markets, and by the amount of hard currency reserves they have allocated for wheat imports.

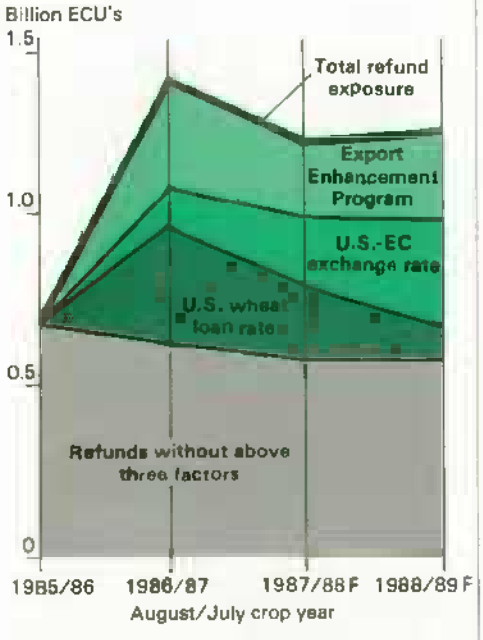
Food Security Act of 1985 Pressures EC Budget

The U.S. export promotion programs in the Food Security Act seek to match the competitor export subsidies that have eroded traditional U.S. markets. EC export subsidies for wheat, excluding sales out of intervention stocks, grew from $365 million in 1985 to an estimated $1.8 billion in 1988.

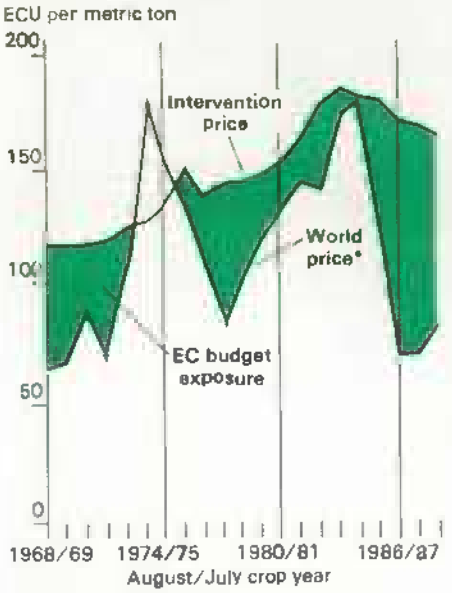
The EC uses export refunds to subsidize exports of surplus wheat. EC farmers need these subsidies to bridge the gap between the high EC market prices and the world price. This gap has increased significantly during the past 2 or 3 years as prices have fallen. The value of this gap multiplied by EC exports to world markets represents EC budgetary exposure to export subsidies for wheat, and is a proxy for actual EC budgetary expenditures.

EC budgetary exposure has been expanded in part by the EEP, the depreciation in the U.S. dollar, and the lower U.S. wheat loan rate. The accompanying chart, "Three Factors Affect EC Budget Exposure," estimates the impact of each of these. From a scenario of no change in exchange rates or U.S. farm programs from 1985/86, EC exposure to export refunds has increased by 120 percent in 1986/87, 110 percent in 1987/88, and 116 percent in 1988/89.

Three Factors Affect EC Refund Exposure



Lower World Wheat Prices Increase EC Budget Exposure



*Wheat export price, f.o.b. Rouen, France.

The EEP probably accounts for 35-40 percent of the increase in EC export refunds, according to the model. In conjunction with CCC export credit guarantee programs, the EEP helped the United States regain markets. The EC has increased its export subsidies in an effort to maintain its market share.

The depreciation in the U.S. dollar relative to the ECU—the European Currency Unit—has increased EC export refund payments by 13 percent in 1986/87, and up to 33 percent in 1988/89. The EC responded to the lower U.S. dollar by cutting its export price as expressed in ECU's, thus effectively maintaining its price denominated in U.S. dollars. Greater export subsidies were therefore needed to compensate EC exporters.

Compared with a $3.30 loan rate, the drop in the U.S. wheat loan rate probably increased EC export refund expenditures by 32 percent in 1986/87, and will raise them by just 8 percent in 1988/89. The higher loan rate under the prior farm act supported higher world prices and kept EC export subsidy costs down. *[Kenneth Bailey (202) 786-1611]*

SOVIET REFORMS & AGRICULTURAL TRADE

Soviet demand for agricultural imports is a function of the country's economic and political goals and structure. The Soviets traditionally strove for national self-sufficiency, relatively low and stable prices for basic goods and services, and stable and sustainable growth in the quantity and quality of consumer goods and services, with higher priority for the defense and capital sectors.

These goals were sought within the framework of a centrally planned and managed economy, administratively set producer and consumer prices, and Government-controlled foreign trade.

Soviet leadership, although still firmly committed to a socialist political-economy, is changing some policies and institutions. These changes likely will affect agricultural trade, including U.S. agricultural exports.

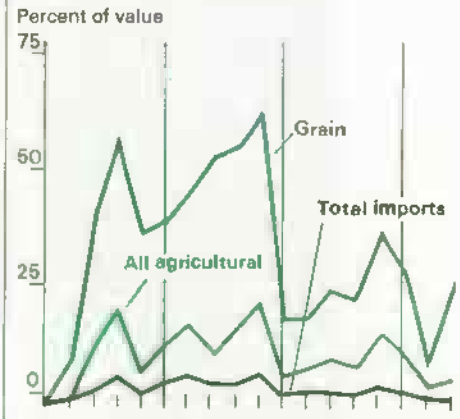
Food Self-Sufficiency Is Still Important Goal

In the past, to quote one Soviet economist," ...imports were a means of covering internal shortages and exports were regarded as a necessary evil, virtually the price paid for imports" in the USSR. Since the ruble is not a convertible currency, the USSR must earn sufficient hard (convertible) currency with its exports to pay for imports, or else work out barter agreements with individual countries.

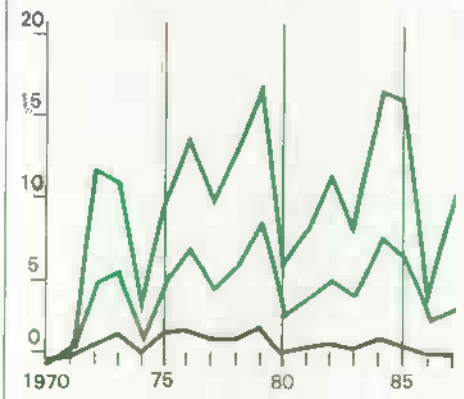
Large price increases for oil and gold, coupled with greater export volumes (including arms), raised Soviet hard currency earnings tenfold from 1973 to 1983, to over $32 billion. The USSR used part of this windfall to increase agricultural imports. The imports helped shelter consumers from the effects of erratic domestic farm production and the stagnation in the agricultural sector that became problematic in the late 1970's and early 1980's.

The Soviets' agricultural imports rose from an annual average of $2.6 billion (20 percent of total imports) in 1970-72 to almost $19 billion (24 percent) in 1981-85. Grain imports rose from an average of $0.5 billion (3 percent of total imports) to almost $7 billion (8 percent). Hard currency grain imports rose from $0.4 billion (6 percent of hard currency imports) to $5.7 billion (21 percent).

U.S. Shares of Soviet Imports Fluctuate as Much as. . .



. . Soviets' Share of U.S. Exports



1987 estimated.

Then, in the mid-1980's, hard currency revenues fell, averaging about $26 billion annually in 1985-87. The drop, combined with larger domestic oilseed and grain harvests and generally lower world grain prices, helped the USSR cut its agricultural import bill. Agricultural imports in 1986-87 averaged an estimated $15.5 billion per year (17 percent of total imports). Grain imports in 1986-87 averaged less than $3 billion annually (3 percent of total imports), less than half the 1981-85 average.

The U.S. often captured a large share of the USSR's agricultural import growth. U.S. farm exports to the Soviets averaged $1.5 billion annually during 1972-87, of which 95 percent was grain and oilseeds.

In 1988, U.S. agricultural exports to the USSR will continue the rebound from 1986's 13-year low, and they should exceed $1.4 billion because of much larger wheat, soybean, and soybean meal shipments. The U.S. provided the USSR with 13 million tons of wheat under the Export Enhancement Program in 1987-88.

As Soviet officials reevaluate the role of foreign trade, they cite renewed appreciation of the "Leninist principles" of the international division of labor. So far, however, this adjustment does not extend to a willingness to settle for lower domestic self-sufficiency in food.

The commitment to food self-sufficiency is illustrated by General Secretary Mikhail Gorbachev's announcement of the 1995 grain production goal of 260-280 million tons. This is 50 percent higher than the average of 1981-85, when grain imports averaged 40 million tons a year. Mr. Gorbachev stated, "Without increasing grain production it is impossible to resolve the task of ensuring the country's self-sufficiency in feeds and reducing imports."

Reforms initiated in 1986 relaxed some of the state's centralized control of foreign trade, putting trade of most equipment, machinery, and technology under the control of the relevant domestic industries. Still, the reform left about 80 percent of Soviet trade under the control of the Ministry of Foreign Trade (now reorganized into the Ministry of Foreign Economic Relations).

Trade in grains, oilseeds, meat and dairy products, fuel, and raw materials remains centralized. The super-ministry for the agro-industrial complex controls imports of cocoa beans and products, coffee, tea, spices, nuts, fruit and vegetables, baby food, tobacco, seed and seedlings, breeding stock, research animals, embryos, and slaughter livestock.

Soviets Rethink the Commitment To Low Food Prices

Prices of bread, pasta, meat, dairy products, and many other foods in Soviet state food stores (which account for most retail food distribution) have been stable since the early 1960's. Wages have increased continually and real food prices have declined since 1965.

Because of the low retail prices and the rising costs of production, processing, and distribution, state subsidies for agricultural commodities in 1987 were 60 billion rubles ($94 billion)—about 15 percent of state expenditures. Meat and poultry accounted for 48 percent of these subsidies and milk 33 percent. Retail prices recoup only a third to a half of the state's expenditures for producing and marketing red meat and dairy products.

The Soviets are planning a major overhaul of the pricing system as part of the move from administrative to economic management of the economy. The reform is to be in place by 1991. Despite arguments from some Soviet economists for market-determined prices, though, the state likely will continue to set prices for a wide range of goods and services, and will impose guidelines and monitor those prices which can be set independently.

The Government says it will fully compensate lower income consumers, who likely spend over 50 percent of their incomes on food, for price increases for food or other basic goods and services. Officials argue that primarily middle- and high-income buyers, who benefit more from the current subsidies because of their much greater animal product consumption, will be affected by the price increases.

The domestic price hikes may have limited impact on agricultural imports. Public resistance may be so great that the increases will not be large, or incomes will be raised to offset the price changes. As incomes have climbed substantially and retail prices remained stable, the underlying demand for animal products and other preferred foods has become so great that it will exceed supply at any level of prices likely to be adopted under the reform. Furthermore, changes in consumer demand will be reflected in imports only as much as the state chooses, since trade in most foodstuffs remains entirely under state control.

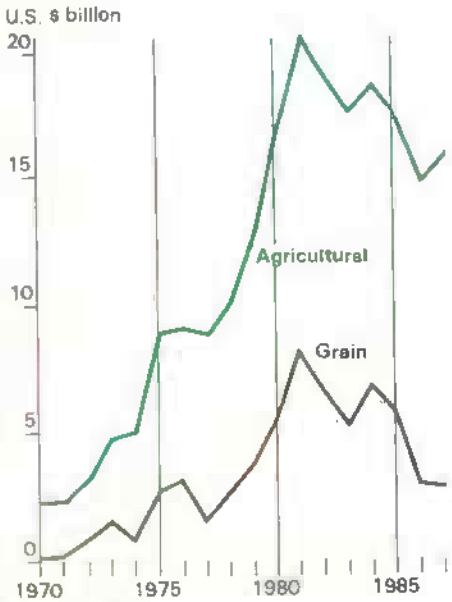
Consumer Needs To Be Given Higher Priority

In restructuring the economy, the leadership maintains that Soviet consumer needs must be given higher priority as a proof of the viability of socialism, and also as a means to encourage interest in the reforms. The Government's plans to improve availability and quality of consumer goods and services, including food products, rely primarily on growth resulting from managerial and incentive changes.

The agro-industrial sector's already large share of total Soviet investment (over 30 percent) likely will not be increased. The usefulness of agricultural investments will continue to be constrained by the tendency to invest in large-scale projects with low returns.

However, the plan to shift a greater share of agricultural investment into processing and distribution should cut field-to-table losses, now estimated at 25 percent and higher. Furthermore, agriculture may benefit indirectly from investment in other sectors of the economy, as the defense and heavy industries augment consumer production. For example, in 1988 the defense industry became responsible for production of food-processing equipment, after the Ministry of Machine Building for the Light and Food Industries was disbanded.

Soviet Agricultural Imports Recede From 1981 Peak



1987 estimated.

The reforms aim to change the nature of the central control and thereby increase the productivity of existing resources. Within farms, factories, and other enterprises, managers and workers are to take greater initiative in production and marketing decisions. The Government is supporting contracting and leasing arrangements (including to family units), small- to medium-size member-initiated cooperatives, and even individual labor activities, to overcome the problems of large-scale, centrally planned production and distribution.

In agriculture, the Soviets say, such new arrangements can dramatically increase land, animal, and equipment productivity, and raise crop and livestock output. However, politicians and Government managers find it difficult to relinquish control. Purchase orders for essential state needs were to replace state plans that cover virtually all production in selected areas this year, but managers complain that the orders are different from plans in name only.

Along with increased independence, managers and workers now are expected to take more financial responsibility. With the greater risks should come greater rewards. But the Soviet tradition of income leveling will need to be overcome. Even new laws contain safeguards against "excessive" remuneration, and public sentiment in the press shows continued resistance to significant differentials in incomes.

Reform Results Less Than Potential

The changes planned and underway likely will help raise Soviet agricultural production and productivity and cut import requirements. But, they may not be thorough or effective enough to reduce import dependence radically. Officials may vacillate on the scope, pace, and details of restructuring, and vested interests are resisting change.

If Soviet leadership effectively implements more radical changes, possible increases in production and productivity could reverse Soviet import dependence. However, a more prosperous economy, more fully receptive to trade, would have the potential for absorbing more food and other consumer imports. *[Kathryn Zeimetz (202) 786-1710]*

Ethanol Could Affect Corn Prices, Farm Income, & Government Outlays

Recently, public attention has refocused on alcohol fuels as a solution to multiple problems: meeting standards of of the Clean Air Act; reducing U.S. petroleum imports, which have increased to levels of the early 1970's; and lowering corn stocks, which last year rose to nearly 5 billion bushels and drove corn prices to their lowest in 15 years. Alcohol fuels, using ethanol or methanol, offer one approach for addressing national air quality standards and energy security. Ethanol production, using corn as a feedstock, offers the additional possibility of an expanded domestic market for grain.

Under the current law, 10-percent ethanol blended fuels are exempt from 6 cents of the 9-cent-per-gallon Federal gasoline excise tax through September 1993. With the existing Federal tax exemption, ethanol likely will remain cost competitive as a fuel blending agent, especially given its value as an octane enhancer.

Without the exemption, and given the agricultural and energy market conditions likely to prevail over the next 10 to 15 years, it may be difficult for ethanol to compete on a direct cost basis with many other fuel blending agents. While low corn and grain prices are favorable for ethanol, the glut in world petroleum markets works against ethanol's competitiveness.

Ethanol Increases Corn Demand But Lowers Oilseed Demand

Although ethanol can be produced from many grains and from starch and sugar crops, nearly all ethanol in the United States is produced from corn, thus affecting corn demand. As a byproduct, it increases output of high-protein animal feed.

Byproducts vary depending on the ethanol production process. For every bushel of corn converted to ethanol in the dry-milling process, 18 pounds of distiller's dried grains are produced. Wet-milling of 1 bushel of corn for starch, sweetener, or ethanol produces 2.5 pounds of gluten meal (60 percent crude protein), 12.5 pounds of gluten feed (20-21 percent crude protein), and germ which is converted into 1.6 pounds of corn oil.

Besides raising corn prices, expanded ethanol production reduces the demand for oilseeds, including soybeans, cottonseed, and sunflower seeds. Lower prices for these crops would enhance the relative profitability of corn, at least in the near term. Depending on corn prices and Government programs, farmers likely would expand their corn planting relative to soybeans.

If 1987's favorable profit conditions for producing ethanol and the Federal tax exemption continued through 2000, production could increase threefold (to about 2.7 billion gallons per year) by the mid-1990's. The additional corn demand—nearly 800 million bushels per year—could increase corn prices by 35 to 50 cents per bushel, assuming future farm commodity programs are similar to the Food Security Act of 1985.

Oilseed and protein prices are reduced by increased ethanol production, because greater supplies of protein feeds and corn oil result. Ethanol production of almost 2.7 billion gallons would generate 5 million tons of soybean meal equivalent, an amount equaling 20 percent of current soybean meal production. In addition, it would generate over 800 million pounds of corn oil, equaling 7 percent of domestic edible oil production.

The resulting changes in relative corn and soybean prices would induce farmers to shift from oilseed to corn production. The overall reduction in soybean prices likely would be minor.

Ethanol Modestly Increases Food Expenditures and Volume of Exports

If ethanol production grew threefold, it could cost consumers, through higher prices, an additional $150 million per year in food expenditures. This is less than 1 percent of consumer expenditures on food.

Increases in the export volume of protein products likely would be offset by decreases in corn exports, since corn prices would rise and protein product prices would fall. Export demand for other crops would climb slightly as other countries turned to substitutes for higher priced corn.

Aggregate Farm Income Effects Differ by Type of Producer

Farm commodity programs buffer the effects of market price changes on farm income. When market prices are low relative to target prices, and farmers' program participation is high, modest changes in commodity prices have little effect on farm

income. Under such conditions, increased ethanol production would have significant income effects only for farmers who were not participating in farm programs.

Changes in farm income would also be moderated by different effects among grain, oilseed, and livestock producers. Grain producers would increase their income, but livestock producers, who would pay higher corn prices, would lose. Even among livestock producers, income effects likely would vary. Those who could avoid higher corn prices by substituting ethanol byproducts for corn would reduce their feed costs. The amount of byproduct substitution for corn is limited, however, by animals' dietary needs.

For small changes in ethanol production, commodity programs and offsetting effects among crop and livestock producers would result in relatively small effects on aggregate farm revenue and income. If ethanol production expanded to 2.7 billion gallons by 1995, net farm income would increase less than $1 billion, assuming the provisions of the current farm bill extended beyond 1989.

Annual gross receipts from crop production could increase by $1-$2 billion. The largest gains in receipts would be for corn, and growers of sorghum and wheat would also benefit. The biggest losses would be for those specializing in soybeans and those who combine cotton and soybeans. Because different crops would gain and lose, interregional income would shift. The biggest decrease would occur in the Delta and the biggest increase in the Corn Belt.

Lower Program Costs Offset By Drop in Highway Revenues

From the Federal budget perspective, increases in ethanol production would decrease farm program costs in three ways. First, farmers in the program would receive lower deficiency payments as the price for the commodity was driven up toward the target price. Second, more farmers would be able to pay off their CCC nonrecourse loans, thereby reducing CCC storage costs.

Third, farmers' cost of participating in the program, in terms of forgone revenue from acreage set-aside requirements, would climb as the price increased. Therefore, the number of farmers participating in the program would decline. Lower deficiency payments, fewer participants, and lower storage costs would combine to reduce Government payments.

Corn price increases would cause competing grain prices to increase. The effect would be to lower program costs for wheat, sorghum, oats, and barley. Cumulative decreases in Government commodity program outlays through 1995 would be positive under a gradual expansion of ethanol to 2.7 billion gallons.

The largest outlay decreases would come from the corn program. However, CCC soybean stocks might rise as high-protein ethanol byproducts competed in the animal feed market.

Federal savings from farm programs would be offset by forgone Highway Trust Fund revenues. The fund forgoes 60 cents for every gallon of fuel ethanol blended with gasoline. If the ethanol tax exemption were extended beyond 1993, and ethanol production reached 2.7 billion gallons, the cumulative Trust Fund revenues forgone would reach $4 billion by 1995.

The Federal Government would accumulate savings through 1995 under an expanded ethanol industry. But beyond 1995, the net reductions in farm program outlays likely would be overwhelmed by the excise tax losses. By 1999, the total pre-1995 gains from reduced farm program outlays would likely be offset.

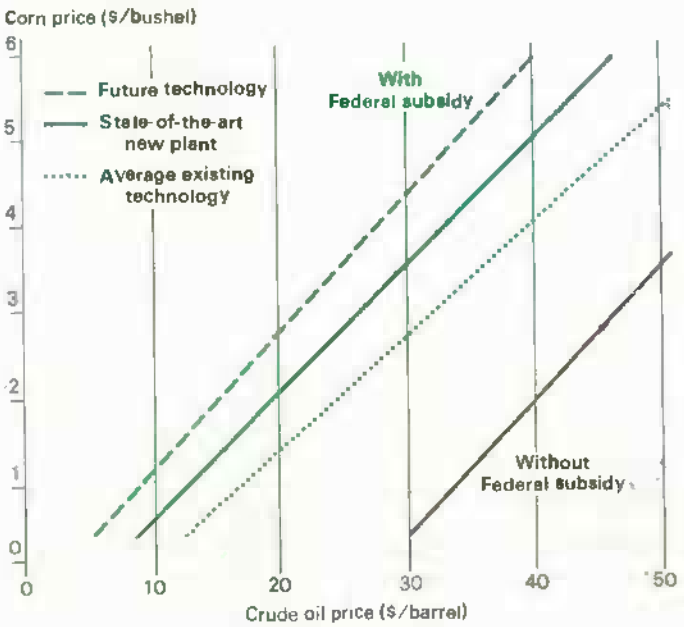
Ethanol Competitiveness With Oil Depends on Federal Tax Exemption

Ethanol's competitiveness with petroleum depends partly on how ethanol is used in blended fuels. As a fuel extender, it has a lower energy content than gasoline, and vehicles using it may have reduced mileage. But, ethanol added to gasoline increases octane and therefore competes with a variety of octane-enhancing blending agents that typically sell above the price of gasoline. Ethanol's competitive position further depends on the fuel distribution system, Federal and State subsidies, and environmental requirements.

Ethanol's competitiveness also depends on relative grain and crude oil prices. With $2-per-bushel corn and the existing Federal subsidy, ethanol produced using average existing technology is competitive with crude oil at $22-$24 per barrel, compared with $20 per barrel for the newest ethanol-producing technology. Further technological improvements within the next few years could make ethanol competitive at $18 per barrel of crude oil with the existing Federal subsidy.

Without the subsidy and with state-of-the-art technology, crude oil prices would have to rise to at least $40 per barrel to make ethanol competitive. *[Sally Kane (202) 786-1405]*

Ethanol's Competitiveness Depends on Technology & Subsidies



Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1987				1988				
	II	III	IV	Annual	I	II F	III F	IV F	Annual F
Prices received by farmers (1977=100)	128	128	129	127	130	132	128	129	130
Livestock & products	149	150	144	146	148	150	146	146	147
Crops	106	105	113	106	112	114	110	111	112
Prices paid by farmers, (1977=100)									
Prod. items	147	148	150	147	152	155	153	153	153
Commodities & services, int., taxes, & wages	162	164	165	162	165	168	169	168	168
Cash receipts ($ bil) 1/	130	139	136	141	145	132	140	132	134-139
Livestock ($ bil)	73	79	75	75	73	70	75	72	74-76
Crops ($ bil)	58	60	61	61	72	63	65	60	64-68
Market basket (1982-84=100)									
Retail cost	112	112	112	112	114	--	--	--	--
Farm value	99	99	95	97	96	--	--	--	--
Spread	118	119	122	119	123	--	--	--	--
Farm value/retail cost (%)	31	31	30	30	30	--	--	--	--
Retail prices (1982-84=100)									
Food	113	114	114	114	116	117	117	118	117
At home	112	112	112	112	114	114	115	116	115
Away-from home	116	118	119	117	120	121	122	123	121
Agricultural exports ($ bil) 2/	6.5	6.9	8.5	27.9	9.4	8.0	7.6	9.0	33.5
Agricultural imports ($ bil) 2/	5.3	4.8	5.2	20.6	5.8	5.0	5.0	5.0	21.0
Production: *									
Red meat (mil lb)	9,240	9,624	10,096	38,442	9,665	9,643	9,630	9,668	38,606
Poultry (mil lb)	4,932	5,195	5,112	19,772	4,986	5,285	5,410	5,200	20,881
Eggs (mil doz)	1,438	1,439	1,479	5,797	1,463	1,405	1,415	1,465	5,763
Milk (bil lb)	37.4	35.5	34.7	142.5	36.1	38.0	36.0	34.9	145.0
Consumption, per capita:									
Red meat and poultry (lb)	52.5	53.7	56.7	214.8	54.1	54.9	55.2	56.0	220.1
Corn beginning stocks (mil bu) 3/	8,248.2	6,332.2	4,881.7	4,881.7	9,768.5	7,631.5	--	--	--
Corn use (mil bu) 3/	1,916.5	1,451.0	2,177.9	7,409.8	2,137.6	--	--	--	--
Prices: 4/									
Choice steers--Omaha ($/cwt)	68.60	65.04	64.31	64.60	68.28	73-74	65-69	66-72	68-71
Barrows and gilts--7 mkts. ($/cwt)	56.18	58.97	43.51	51.69	44.74	46-47	45-49	42-48	44-47
Broilers--12-city (cts/lb)	48.2	48.7	42.5	47.4	45.4	53-54	49-53	44-50	48-51
Eggs--NY Gr. A large (cts/doz)	58.9	63.5	59.2	61.6	55.0	53-54	60-64	63-69	58-61
Milk--all at plant ($/cwt)	12.07	12.30	12.83	12.51	12.23	11.40-11.50	11.50-11.90	12.00-13.00	11.75-12.15
Wheat--Kansas city HRW ($/bu)	2.94	2.65	2.86	2.72	3.20	--	--	--	--
Corn--Chicago ($/bu)	1.82	1.68	1.74	1.64	1.95	--	--	--	--
Soybeans--Chicago ($/bu)	5.37	5.16	5.36	5.19	6.14	--	--	--	--
Cotton--Avg. spot mkt. (cts/lb)	64.7	73.5	63.7	64.3	59.1	--	--	--	--

	1980	1981	1982	1983	1984	1985	1986	1987 P	1988 F
Gross cash income ($ bil)	143.3	146.0	150.6	150.4	155.1	156.9	152.0	159	158-163
Gross cash expenses ($ bil)	109.1	113.2	112.5	113.3	116.3	109.6	100.1	103	103-106
Net cash income ($ bil)	34.2	32.8	38.1	37.1	38.8	47.3	52.0	56	53-59
Net farm income ($ bil)	16.1	26.9	23.5	12.7	32.0	32.3	37.5	46	42-48
Farm real estate values (1977=100) 5/	145	158	157	148	146	128	112	103	106

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports and domestic disappearance. 4/ Simple averages. 5/ Nominal values as of February 1. P = preliminary. F = forecast. * = commercial production.

Table 2.—U.S. Gross National Product & Related Data

	Annual			1987				1988
	1985	1986	1987	I	II	III	IV	I R
	$ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,010.3	4,235.0	4,488.5	4,377.7	4,445.1	4,524.0	4,607.4	4,668.7
Personal consumption expenditures	2,629.4	2,799.8	2,967.8	2,893.8	2,943.7	3,011.3	3,022.6	3,071.9
Durable goods	368.7	402.4	413.7	396.1	409.0	436.8	413.0	426.4
Nondurable goods	913.1	939.4	982.9	969.9	982.1	986.4	993.1	998.8
Clothing & shoes	157.2	167.5	177.0	174.0	175.8	178.7	179.6	178.9
Food & beverages	472.8	497.8	515.8	514.8	515.0	514.0	519.3	523.9
Services	1,347.5	1,458.0	1,571.2	1,527.7	1,552.6	1,588.1	1,616.5	1,646.8
Gross private domestic investment	641.6	671.0	717.5	699.9	702.6	707.4	760.2	756.7
Fixed investment	631.6	655.2	671.5	648.2	662.3	684.5	690.8	704.3
Change in business inventories	10.0	15.7	46.1	51.6	40.3	22.9	69.4	52.4
Net exports of goods & services	-79.2	-105.5	-119.6	-112.2	-118.4	-123.7	-124.3	-109.4
Government purchases of goods & services	818.6	869.7	922.8	896.2	917.1	929.0	948.8	949.5
	1982 $ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	3,607.5	3,713.3	3,821.0	3,772.2	3,795.3	3,835.9	3,880.8	3,918.0
Personal consumption expenditures	2,352.6	2,450.5	2,497.2	2,475.9	2,487.5	2,520.7	2,504.6	2,530.9
Durable goods	352.7	383.5	388.2	375.9	385.4	406.9	384.5	396.7
Nondurable goods	849.5	877.2	878.1	883.2	879.0	875.7	874.6	878.4
Clothing & shoes	147.9	158.0	159.5	160.4	157.3	161.7	158.6	158.1
Food & beverages	436.5	444.9	441.2	447.5	441.6	437.1	438.6	441.7
Services	1,150.4	1,189.8	1,230.9	1,216.9	1,223.1	1,238.1	1,245.6	1,255.7
Gross private domestic investment	636.1	654.0	687.6	671.8	673.7	681.9	723.1	735.7
Fixed investment	628.7	640.2	644.7	624.2	634.7	657.3	662.6	680.3
Change in business inventories	7.4	13.8	42.9	47.6	39.0	24.6	60.5	55.4
Net exports of goods & services	-108.2	-145.8	-135.5	-135.2	-132.7	-138.4	-135.8	-119.1
Government purchases of goods & services	726.9	754.5	771.7	759.6	766.7	771.7	788.9	770.5
GNP implicit price deflator % change	3.2	2.6	3.0	4.2	3.5	2.8	2.7	1.7
Disposable personal income ($ bil)	2,841.1	3,022.1	3,181.7	3,125.9	3,130.6	3,195.3	3,275.0	3,325.5
Disposable per. income (1982 $ bil)	2,542.2	2,645.1	2,677.2	2,674.6	2,645.5	2,674.7	2,713.8	2,739.8
Per capita disposable per. income ($)	11,872	12,508	13,050	12,865	12,858	13,090	13,384	13,557
Per capita dis. per. income (1982 $)	10,622	10,947	10,980	11,008	10,865	10,958	11,090	11,169
U.S. population, total, incl. military abroad (mil)	239.3	241.6	243.9	243.1	243.6	244.2	244.8	245.4
Civilian population (mil)	237.0	239.4	241.7	240.8	241.4	242.0	242.6	243.1

	Annual			1987	1988			
	1985	1986	1987	Apr	Jan	Feb	Mar	Apr
	Monthly data seasonally adjusted							
Industrial production (1977=100)	123.7	125.1	129.8	127.4	134.4	134.4	134.7	135.6
Leading economic indicators (1967=100)	168.6	179.3	189.9	187.6	188.7	191.5	191.9	192.2
Civilian employment (mil. persons)	107.2	109.6	112.4	111.8	114.1	114.4	114.1	114.7
Civilian unemployment rate (%)	7.2	7.0	6.2	6.3	5.8	5.7	5.6	5.4
Personal income ($ bil annual rate)	3,327.0	3,534.3	3,746.5	3,701.9	3,872.1	3,895.7	3,939.2	3,943.6
Money stock-M2 (daily avg) ($bil) 1/	2,562.6	2,807.8	2,901.0	2,847.4	2,924.9	2,946.1	2,967.8	2,993.0
Three-month Treasury bill rate (%)	7.48	5.98	5.82	5.76	5.90	5.69	5.69	5.92
Aaa corporate bond yield (Moody's) (%)	11.37	9.02	9.38	8.85	9.88	9.40	9.39	9.67
Housing starts (thou) 2/	1,742	1,805	1,621	1,635	1,382	1,519	1,554	1,561
Auto sales at retail, total (mil)	11.0	11.4	10.3	10.5	10.4	11.0	10.7	10.5
Business inventory/sales ratio	1.55	1.54	1.51	1.51	1.54	153	150	NA
Sales of all retail stores ($ bil)	115.0	121.2	125.5	124.8	128.8	130.1	132.4 P	131.6
Nondurable goods stores ($ bil)	71.8	73.9	76.9	78.7	80.1	80.4	81.8 P	81.3
Food stores ($ bil)	23.7	24.6	25.3	26.1	26.2	26.6	27.0 P	26.9
Eating & drinking places ($ bil)	11.1	12.1	12.7	12.2	12.5	12.6	12.7 P	12.5
Apparel & accessory stores ($ bil)	6.2	6.7	7.1	6.5	6.5	6.5	6.7 P	6.8

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. NA = not available.

Information contact: James Malley (202) 786-1782.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986	1987 P	1988 F	1989 F
	Annual percent change											
Total foreign												
Real GNP	5.5	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.7	2.9	2.7	2.8
CPI	10.2	14.0	16.9	15.6	14.4	18.4	22.5	21.6	11.4	16.6	25.2	19.0
Export earnings	27.5	14.6	22.2	-2.7	-7.0	-2.6	5.7	1.6	12.1	16.9	10.4	8.4
Developed less U.S.												
Real GNP	4.8	3.1	2.4	1.4	1.1	1.9	3.4	3.3	2.4	2.8	2.4	2.2
CPI	8.4	9.4	10.9	9.6	8.0	6.0	5.1	4.7	2.7	2.6	2.8	3.3
Export earnings	23.9	14.9	17.0	-3.3	-4.3	-0.5	6.3	4.6	19.4	17.5	10.9	8.1
Centrally planned												
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	2.9	3.9	3.5	3.8	3.7
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	6.7	7.7	8.0
Latin America												
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.3	3.6	3.7	2.3	1.2	2.3
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.1	179.4	86.1	139.1	231.5	160.9
Export earnings	28.1	12.8	30.1	5.3	-10.0	-1.0	6.7	-6.0	-13.9	8.7	5.2	6.5
Africa & Middle East												
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	1.1	0.0	-1.2	0.1	1.7	3.2
CPI	8.7	16.4	24.6	17.3	12.9	16.7	19.4	11.2	12.0	14.9	12.7	11.9
Export earnings	49.6	43.2	37.9	-9.2	-19.7	-17.6	-7.2	-7.8	-12.5	9.9	10.3	7.6
Asia												
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	6.0	5.2	5.3
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	5.2	4.4	5.7	6.1	6.8
Export earnings	30.1	19.4	27.8	6.8	-0.3	3.4	13.7	-1.2	6.0	21.2	13.3	11.8

P = preliminary. F = forecast.

Information contact: Timothy Baxter (202) 786-1790.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1987		1988				
	1985	1986	1987	May	Dec	Jan	Feb	Mar	Apr R	May P
	1977=100									
Prices received										
All farm products	128	123	127	128	127	131	130	130	130	134
All crops	120	107	106	108	113	115	109	110	111	116
Food grains	133	109	102	105	114	116	120	118	119	120
Feed grains & hay	122	98	85	92	92	93	96	97	100	102
Feed grains	122	96	81	85	89	90	93	94	95	95
Cotton	93	91	98	99	106	100	94	95	98	93
Tobacco	153	138	130	126	137	134	134	134	126	126
Oil-bearing crops	84	77	79	81	86	87	89	91	95	102
Fruit, all	180	169	181	169	170	170	166	163	160	196
Fresh market 1/	192	177	191	177	178	178	174	170	166	207
Commercial vegetables	129	130	144	131	177	199	129	136	132	116
Fresh market	122	123	147	130	195	223	127	136	131	109
Potatoes & dry beans	124	114	127	171	89	93	94	102	105	114
Livestock & products	136	138	146	148	141	147	149	148	148	152
Meat animals	142	145	163	169	157	166	172	171	172	178
Dairy products	131	129	129	124	131	129	127	123	119	117
Poultry & eggs	119	128	108	107	98	101	95	101	98	105
Prices paid										
Commodities & services, interest, taxes, & wage rates	163	159	162	--	--	165	--	--	168	--
Production items	151	144	147	--	--	152	--	--	155	--
Feed	116	108	103	--	--	112	--	--	112	--
Feeder livestock	154	153	179	--	--	193	--	--	198	--
Seed	153	148	148	--	--	149	--	--	150	--
Fertilizer	135	124	118	--	--	121	--	--	132	--
Agricultural chemicals	128	127	124	--	--	123	--	--	128	--
Fuels & energy	201	162	161	--	--	161	--	--	163	--
Farm & motor supplies	146	144	144	--	--	144	--	--	146	--
Autos & trucks	193	198	208	--	--	213	--	--	215	--
Tractors & self-propelled machinery	178	174	174	--	--	176	--	--	179	--
Other machinery	183	184	185	--	--	188	--	--	200	--
Building & fencing	136	136	137	--	--	138	--	--	138	--
Farm services & cash rent	150	150	146	--	--	150	--	--	150	--
Interest payable per acre on farm real estate debt	237	219	207	--	--	193	--	--	193	--
Taxes payable per acre on farm real estate	133	134	136	--	--	138	--	--	138	--
Wage rates (seasonally adjusted)	154	160	167	--	--	162	--	--	162	--
Production items, interest, taxes, & wage rates	157	150	152	--	--	155	--	--	158	--
Ratio, prices received to prices paid 2/	79	77	78	79	77	79	79	79	77	80
Prices received (1910-14=100)	585	561	578	586	582	599	592	593	594	613
Prices paid, etc. (Parity index) (1910-14=100)	1,120	1,096	1,115	--	--	1,138	--	--	1,154	--
Parity ratio (1910-14=100) 2/	52	51	52	--	51	53	--	--	51	--

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. R = revised. P = preliminary.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1987		1988				
	1985	1986	1987	May	Dec	Jan	Feb	Mar	Apr R	May P
Crops										
All wheat ($/bu)	3.20	2.71	2.55	2.66	2.70	2.75	2.79	2.74	2.79	2.83
Rice, rough ($/cwt)	7.85	5.04	4.49	3.71	7.37	7.70	8.97	8.79	8.33	8.27
Corn ($/bu)	2.49	1.96	1.56	1.66	1.72	1.77	1.83	1.86	1.88	1.89
Sorghum ($/cwt)	3.97	3.11	2.56	2.69	2.73	2.75	2.88	2.92	2.94	2.87
All hay, baled ($/ton)	69.90	61.60	63.00	73.40	65.00	62.80	65.50	66.20	72.90	80.90
Soybeans ($/bu)	5.42	5.00	5.07	5.20	5.63	5.73	5.97	6.06	6.40	6.98
Cotton, Upland (cts/lb)	56.1	54.8	59.4	60.0	64.2	60.6	56.8	57.7	59.4	56.4
Potatoes ($/cwt)	3.92	5.03	4.47	7.23	3.57	3.75	3.73	4.00	4.09	4.48
Lettuce ($/cwt)	10.90	11.90	14.80	8.07	34.80	35.60	11.10	13.80	9.33	8.28
Tomatoes ($/cwt)	24.10	25.10	25.10	28.00	22.60	31.50	19.40	28.60	29.90	22.40
Onions ($/cwt)	9.08	10.90	11.40	22.50	10.10	15.30	13.80	12.50	15.10	8.50
Dry edible beans ($/cwt)	17.60	19.01	15.50	19.00	13.10	13.40	14.40	16.30	16.90	18.20
Apples for fresh use (cts/lb)	17.3	19.1	NA	22.4	11.8	11.5	12.8	12.8	11.1	10.8
Pears for fresh use ($/ton)	349.00	372.00	217.00	337.00	147.00	135.00	193.00	219.00	229.00	340.00
Oranges, all uses ($/box) 2/	7.41	4.42	4.55	5.62	5.45	6.19	6.24	5.99	6.42	7.87
Grapefruit, all uses ($/box) 2/	4.01	4.29	5.00	4.94	5.84	5.34	5.25	4.86	4.50	3.96
Livestock										
Beef cattle ($/cwt)	54.00	52.80	61.40	63.00	62.20	65.40	67.40	68.30	69.00	70.00
Calves ($/cwt)	62.40	60.90	78.10	77.40	83.10	86.20	92.60	93.50	93.20	91.90
Hogs ($/cwt)	43.90	50.10	50.90	54.40	40.30	43.00	45.80	42.20	41.90	46.90
Lambs ($/cwt)	68.10	69.10	77.90	90.10	72.80	80.70	80.40	80.20	74.80	77.00
All milk, sold to plants ($/cwt)	12.70	12.50	12.50	12.00	12.70	12.50	12.30	11.90	11.60	11.40
Milk, manuf. grade ($/cwt)	11.78	11.55	11.40	11.10	11.60	11.30	11.00	10.70	10.60	10.50
Broilers (cts/lb)	30.1	34.5	28.5	29.9	24.6	27.1	25.7	27.5	28.0	33.5
Eggs (cts/doz) 3/	57.4	61.2	53.8	49.3	48.6	49.3	46.9	50.8	45.5	43.1
Turkeys (cts/lb)	47.2	44.4	34.2	35.5	38.1	31.8	29.0	28.2	28.4	29.7
Wool (cts/lb) 4/	63.3	66.8	91.7	106.0	86.2	75.2	93.3	118.0	153.0	165.0

1/ Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 4/ Average local market price, excluding incentive payments. R = revised. P = preliminary. NA = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Producer and Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1987					1988			
	1987	Apr	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
					1982-84=100					
Consumer price index, all items	113.6	112.7	115.0	115.3	115.4	115.4	115.7	116.0	116.5	117.1
Consumer price index, less food	113.6	112.7	115.1	115.5	115.7	115.5	115.7	116.0	116.6	117.2
All food	113.5	112.8	114.1	114.3	114.2	114.7	115.7	115.7	115.9	116.6
Food away from home	117.0	116.1	118.0	118.3	118.6	118.9	119.3	119.7	120.2	120.7
Food at home	111.9	111.3	112.4	112.4	112.1	112.8	114.1	113.9	113.9	114.6
Meats 1/	109.6	106.9	112.0	111.8	111.1	110.4	110.1	110.2	110.9	110.8
Beef & veal	106.3	104.0	107.4	107.8	108.6	108.5	107.7	108.5	109.8	110.5
Pork	115.9	111.3	121.1	119.0	115.5	113.1	113.4	112.3	112.6	111.4
Poultry	112.6	113.4	112.5	111.8	107.9	107.8	108.9	108.4	109.1	110.2
Fish	129.9	129.5	132.0	131.4	132.3	133.3	137.2	137.0	136.0	139.3
Eggs	91.5	91.1	97.6	91.4	93.9	85.5	90.1	85.5	87.9	85.0
Dairy products 2/	105.9	105.3	106.4	106.9	106.9	106.7	107.4	107.3	107.2	107.1
Fats & oils 3/	108.1	108.0	107.8	107.4	108.0	107.7	108.5	109.5	110.3	110.3
Fresh fruit	132.0	134.2	131.7	135.7	125.8	126.3	130.7	132.6	133.8	139.9
Processed fruit	110.6	109.6	112.1	111.5	111.6	112.3	115.1	118.0	119.4	122.1
Fresh vegetables	121.6	123.7	114.6	112.5	121.2	140.2	143.9	133.7	125.6	127.5
Potatoes	116.0	116.2	110.5	101.9	100.6	103.8	104.6	106.2	108.5	111.2
Processed vegetables	107.1	106.4	107.6	107.5	107.3	107.3	107.2	107.6	107.9	108.4
Cereals & bakery products	114.8	114.3	115.4	115.6	116.2	116.8	118.1	118.7	118.9	119.8
Sugar & sweets	111.0	110.7	111.6	111.6	111.4	111.0	112.2	112.2	112.6	112.3
Beverages, nonalcoholic	107.5	108.5	105.8	106.7	105.0	104.8	106.9	107.7	107.7	107.8
Apparel commodities less footwear	109.6	110.8	112.9	115.2	115.0	111.7	109.0	108.8	113.7	116.6
Footwear	105.1	105.8	105.7	107.3	108.0	107.2	106.1	105.8	107.3	109.4
Tobacco & smoking products	133.6	131.6	135.9	136.3	136.5	137.0	140.8	142.2	142.8	142.9
Beverages, alcoholic	114.1	113.3	114.9	115.2	115.4	115.4	115.8	116.8	117.4	118.0

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ralph Parlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1987			1988			
	1985	1986	1987 P	Apr	Nov	Dec R	Jan	Feb	Mar	Apr
					1982=100					
Finished goods 1/	104.7	103.2	105.4	105.1	106.3	105.8	106.2	105.9	106.2	106.9
Consumer foods	104.6	107.2	109.5	109.2	109.8	108.9	110.6	109.4	110.0	110.2
Fresh fruit	108.1	112.9	111.4	106.6	123.4	121.2	106.6	104.2	104.2	102.7
Fresh & dried vegetables	99.4	97.8	103.8	104.9	125.7	109.0	126.3	96.4	96.3	98.4
Dried fruit	88.7	91.9	95.0	94.0	98.0	99.0	99.1	97.8	97.8	97.9
Canned fruit & juice	113.8	111.0	115.4	113.1	116.5	117.2	119.1	119.4	119.5	119.7
Frozen fruit & juice	118.5	103.0	113.4	111.6	117.0	124.4	126.0	130.2	131.1	130.1
Fresh veg. excl. potatoes	100.3	99.3	99.0	102.2	135.4	112.0	135.9	96.8	94.2	98.5
Canned veg. & juices	101.9	101.2	103.5	104.6	102.3	102.6	103.1	103.3	103.6	103.2
Frozen vegetables	106.5	106.6	107.3	107.8	106.6	106.7	106.8	106.5	107.2	106.7
Potatoes	101.2	104.0	120.5	121.9	108.1	110.9	107.5	100.2	108.0	97.6
Eggs	95.6	99.5	87.6	90.1	92.6	70.6	76.5	73.8	79.7	66.7
Bakery products	113.9	116.6	118.5	117.1	120.4	121.4	122.5	122.8	123.1	123.5
Meats	90.9	93.9	100.3	100.0	96.1	93.7	98.0	97.6	98.4	98.6
Beef & veal	90.3	88.1	95.4	97.8	92.4	92.9	96.1	96.3	100.9	101.0
Pork	89.1	99.9	104.7	100.9	95.8	87.5	97.3	95.7	91.5	92.0
Processed poultry	110.4	116.7	103.5	106.6	98.4	96.7	98.2	93.8	98.7	100.6
Fish	114.6	124.9	141.9	134.8	145.4	156.3	159.2	158.2	160.1	159.1
Dairy products	100.2	99.9	101.7	101.2	102.0	101.7	101.1	100.4	100.0	99.9
Processed fruits & vegetables	107.9	104.9	108.6	108.3	108.8	110.1	111.0	111.5	111.9	111.6
Shortening & cooking oils	123.9	103.3	104.0	102.2	106.3	108.9	116.2	114.4	114.7	117.5
Consumer finished goods less foods	103.3	98.5	100.7	100.3	101.9	101.6	101.3	101.3	101.4	102.5
Beverages, alcoholic	107.6	110.1	110.4	111.5	110.1	110.3	110.4	111.3	112.2	112.1
Soft drinks	107.7	109.5	111.9	111.8	112.8	112.8	112.9	113.3	113.9	114.1
Apparel	105.0	106.3	108.4	107.8	109.3	109.9	110.1	110.4	110.7	110.9
Footwear	104.7	106.8	109.4	108.2	110.6	111.4	112.7	114.2	114.3	114.4
Tobacco products	132.5	142.4	154.7	150.9	157.6	163.3	166.3	166.5	166.5	166.5
Intermediate materials 2/	102.6	99.1	101.5	100.2	103.4	103.6	104.2	104.1	104.6	105.5
Materials for food manufacturing	101.4	98.4	100.8	100.1	100.6	99.8	102.0	101.9	101.7	102.8
Flour	99.8	94.5	92.9	92.9	93.3	93.3	94.3	97.5	94.1	96.8
Refined sugar 3/	102.8	103.2	106.5	106.5	107.1	106.5	106.5	106.7	106.7	107.4
Crude vegetable oils	137.5	84.8	84.0	80.6	91.6	92.9	105.0	105.9	101.2	109.9
Crude materials 4/	95.8	87.7	93.7	92.4	94.7	94.4	93.4	94.6	94.1	95.7
Foodstuffs & feedstuffs	94.8	93.2	96.2	96.9	95.3	95.9	96.9	99.6	99.7	101.2
Fruits & vegetables 5/	102.6	103.9	106.6	105.1	124.1	113.8	117.0	99.3	99.3	99.8
Grains	96.1	79.2	71.1	71.0	74.9	78.9	77.5	83.5	80.6	82.3
Livestock	89.1	91.8	101.9	104.3	96.8	98.1	98.7	105.0	105.7	107.1
Poultry, live	117.8	129.6	101.2	105.3	93.9	87.7	96.6	86.9	96.9	97.6
Fibers, plant & animal	97.4	88.3	106.5	98.4	105.1	100.5	100.7	97.8	103.2	103.6
Fluid milk	93.6	90.9	91.9	90.7	93.1	91.5	90.5	89.1	86.7	86.7
Oilseeds	94.4	91.4	99.3	96.4	100.7	106.5	110.0	111.1	112.6	121.5
Tobacco, leaf	101.2	89.7	85.8	84.6	88.5	88.5	87.2	87.2	87.2	87.2
Sugar, raw cane	104.6	104.9	110.3	110.3	110.1	109.7	109.7	111.4	111.4	111.9
All commodities	103.1	100.1	102.8	101.9	104.2	104.2	104.5	104.6	104.9	105.8
Industrial commodities	103.7	99.9	102.6	101.6	104.2	104.2	104.3	104.4	104.7	105.6
All foods 6/	103.9	105.5	107.8	107.4	108.4	107.3	109.3	108.1	108.6	108.9
Farm products & processed foods & feeds	100.6	101.2	103.7	103.3	104.1	104.0	105.3	105.2	105.7	106.5
Farm products	95.1	92.9	95.4	95.7	96.3	95.7	96.8	97.5	97.7	99.0
Processed foods & feeds 6/	103.5	105.4	107.9	107.2	108.1	108.2	109.5	109.2	109.7	110.3
Cereal & bakery products	110.2	111.0	112.6	111.4	115.3	116.7	118.5	119.6	119.6	120.2
Sugar & confectionery	107.9	109.6	112.7	111.9	113.5	113.0	112.8	112.9	113.2	113.3
Beverages	107.7	114.5	112.5	113.3	112.0	112.2	112.4	112.9	113.8	114.2

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). P = preliminary. R = revised.

Information contact: Bureau of Labor Statistics (202) 523-1913.

Table 8.—Farm-Retail Price Spreads

	Annual				1987			1988			
	1984	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Market basket 1/											
Retail cost (1982-84=100)	102.9	104.1	106.3	111.6	110.8	112.0	112.7	113.9	113.5	113.5	114.2
Farm value (1982-84=100)	103.5	96.2	94.9	97.1	97.4	95.8	94.1	95.8	96.1	96.4	96.6
Farm-retail spread (1982-84=100)	102.6	108.3	112.5	119.4	118.1	120.8	122.8	123.6	122.8	122.7	123.7
Farm value-retail cost (%)	35.2	32.4	31.2	30.5	30.8	30.0	29.2	29.4	29.7	29.8	29.6
Meat products											
Retail cost (1982-84=100)	99.8	98.9	102.0	109.6	106.9	111.1	110.4	110.1	110.2	110.9	110.8
Farm value (1982-84=100)	99.4	91.3	94.3	101.2	100.8	95.3	93.1	93.3	99.4	100.2	102.0
Farm-retail spread (1982-84=100)	100.3	106.7	109.8	118.3	113.2	127.3	128.1	127.4	121.3	121.9	119.9
Farm value-retail cost (%)	50.4	46.8	46.8	46.7	47.7	43.4	42.7	42.9	45.7	45.8	46.6
Dairy products											
Retail cost (1982-84=100)	101.3	103.2	103.3	105.9	105.3	106.9	106.7	107.4	107.3	107.2	107.1
Farm value (1982-84=100)	99.2	95.2	92.6	93.3	92.5	93.8	92.5	92.4	90.6	89.3	88.2
Farm-retail spread (1982-84=100)	103.2	110.5	113.3	117.5	117.1	119.0	119.8	121.3	122.7	123.7	124.5
Farm value-retail cost (%)	47.0	44.2	43.0	42.3	42.1	42.1	41.6	41.3	40.5	40.0	39.5
Poultry											
Retail cost (1982-84=100)	107.3	106.2	114.2	112.6	113.4	107.9	107.8	108.9	108.4	109.1	110.2
Farm value (1982-84=100)	112.6	105.9	115.1	93.8	97.8	87.8	85.1	88.8	83.6	88.2	89.7
Farm-retail spread (1982-84=100)	101.1	106.6	113.3	134.2	131.3	131.0	133.9	132.0	137.0	133.1	133.9
Farm value-retail cost (%)	56.2	53.3	53.9	44.6	46.2	43.6	42.2	43.6	41.3	43.3	43.5
Eggs											
Retail cost (1982-84=100)	109.1	91.0	97.2	91.5	91.1	93.9	85.5	90.1	85.5	87.9	85.0
Farm value (1982-84=100)	110.1	85.7	92.4	76.8	79.9	80.6	66.7	68.2	64.6	70.8	61.9
Farm-retail spread (1982-84=100)	107.4	100.4	106.0	117.9	111.2	117.8	119.2	129.3	123.1	118.7	126.5
Farm value-retail cost (%)	64.8	60.5	61.0	53.9	56.4	55.1	50.2	48.7	48.5	51.7	46.8
Cereal & bakery products											
Retail cost (1982-84=100)	103.9	107.9	110.9	114.8	114.3	116.2	116.8	118.1	118.7	118.9	119.8
Farm value (1982-84=100)	102.9	94.3	76.3	71.0	71.1	77.7	76.4	98.2	105.6	102.1	101.3
Farm-retail spread (1982-84=100)	104.1	109.8	115.7	120.9	120.3	121.6	122.4	120.9	120.5	121.2	122.4
Farm value-retail cost (%)	12.1	10.7	8.4	7.6	7.6	8.2	8.0	10.2	10.9	10.5	10.4
Fresh fruits											
Retail cost (1982-84=100)	106.6	118.4	120.4	135.6	137.5	129.5	128.5	133.6	133.7	135.2	141.8
Farm value (1982-84=100)	113.7	110.8	103.8	113.9	95.7	127.3	130.8	110.6	104.4	102.2	89.8
Farm-retail spread (1982-84=100)	103.3	121.8	128.0	145.7	156.8	130.5	127.4	144.2	147.2	150.5	165.8
Farm value-retail cost (%)	33.7	29.6	27.4	26.5	22.0	31.1	32.2	26.2	24.7	23.9	20.0
Fresh vegetables											
Retail costs (1982-84=100)	108.2	103.5	107.7	121.6	123.7	121.2	140.2	143.9	133.7	125.6	127.5
Farm value (1982-84=100)	108.3	93.1	90.0	112.0	123.1	131.8	113.8	122.7	100.4	97.4	104.2
Farm-retail spread (1982-84=100)	108.2	108.9	116.8	126.5	124.0	115.8	153.8	154.9	150.8	140.1	139.5
Farm value-retail cost (%)	34.0	30.5	28.4	31.3	33.8	36.9	27.6	28.9	25.5	26.3	27.7
Processed fruits & vegetables											
Retail cost (1982-84=100)	104.3	107.0	105.3	109.0	108.1	109.6	110.0	111.6	113.4	114.3	116.0
Farm value (1982-84=100)	106.8	117.7	101.5	111.1	112.7	105.8	127.4	130.0	132.0	131.3	133.6
Farm-retail spread (1982-84=100)	103.4	103.7	106.4	108.3	106.7	110.8	104.6	105.8	107.6	109.0	110.5
Farm value-retail costs (%)	24.4	26.2	22.9	24.2	24.8	23.0	27.5	27.7	27.7	27.3	27.4
Fats & oils											
Retail cost (1982-84=100)	106.6	108.9	106.5	108.1	108.0	108.0	107.7	108.5	109.5	110.3	110.3
Farm value (1982-84=100)	124.3	104.3	76.2	74.1	72.1	75.3	78.9	93.5	92.4	93.0	95.2
Farm-retail spread (1982-84=100)	100.2	110.6	117.6	120.6	121.2	120.0	118.3	114.0	116.2	116.7	115.8
Farm value-retail cost (%)	31.3	25.8	19.2	18.4	18.0	18.8	19.7	23.2	22.4	22.7	23.2

	Annual				1987			1988			
	1984	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Beef, Choice											
Retail price 2/ (cts/lb)	239.6	232.6	230.7	242.5	236.8	246.6	245.3	242.9	246.3	248.5	250.2
Net carcass value 3/ (cts)	147.6	135.2	133.1	145.3	150.9	142.4	141.1	144.7	148.3	154.0	156.7
Net farm value 4/ (cts)	140.0	126.8	124.4	137.9	143.7	136.1	134.6	136.6	143.2	148.6	152.4
Farm-retail spread (cts)	99.6	105.8	106.3	104.6	93.1	110.5	110.7	106.3	103.1	99.9	97.7
Carcass-retail spread 5/ (cts)	92.0	97.4	97.6	97.2	85.9	104.2	104.2	98.2	98.0	94.5	93.4
Farm-carcass spread 6/ (cts)	7.6	8.4	8.7	7.4	7.2	6.3	6.5	8.1	5.1	5.5	4.3
Farm value-retail price (%)	58	55	54	57	61	55	55	56	58	60	61
Pork											
Retail price 2/ (cts/lb)	162.0	162.0	178.4	188.4	178.9	189.2	185.6	185.3	183.1	183.3	182.9
Wholesale value 3/ (cts)	110.1	101.1	110.9	113.0	108.4	103.1	106.5	104.0	105.3	103.5	102.5
Net farm value 4/ (cts)	77.4	71.4	82.4	82.7	82.7	65.0	66.2	71.3	75.5	68.6	67.2
Farm-retail spread (cts)	84.6	90.6	96.0	105.7	96.2	124.2	119.4	114.0	107.6	114.7	115.7
Wholesale-retail spread 5/ (cts)	51.9	60.9	67.5	75.4	70.5	86.1	79.1	81.3	77.8	79.8	80.4
Farm-wholesale spread 6/ (cts)	32.7	29.7	28.5	30.3	25.7	38.1	40.3	32.7	29.8	34.9	35.3
Farm value-retail price (%)	48	44	46	44	46	34	36	38	41	37	37

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges made for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Cost Review, 1986. AER No. 574, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1286.

Table 9.—Price Indexes of Food Marketing Costs

(See the June 1988 issue.)

Information contact: Denis Dunham. (202) 786-1870

Table 10.—U.S. Meat Supply & Use

Item	Beg. stocks	Production 1/	Imports	Total supply	Exports	Shipments	Ending stocks	Civilian consumption: Total	Civilian consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/								Pounds	
Beef										
1985	472	23,728	2,071	26,271	328	51	420	25,473	78.8	58.37
1986	420	24,371	2,129	26,919	521	52	412	25,935	78.4	57.75
1987	412	23,566	2,269	26,243	604	52	386	25,201	75.5	64.60
1988 F	386	22,907	2,300	25,593	530	60	435	24,568	72.9	66-72
Pork										
1985	348	14,807	1,128	16,283	128	131	289	15,734	61.9	44.77
1986	289	14,063	1,122	15,474	86	132	248	15,008	58.6	51.19
1987	248	14,374	1,195	15,817	109	124	347	15,237	59.2	51.69
1988 F	347	15,199	1,300	16,847	140	120	330	16,256	62.1	42-48
Veal										
1985	14	515	20	549	4	1	11	533	1.8	62.42
1986	11	524	27	562	5	1	7	549	1.9	60.89
1987	7	429	24	460	7	1	4	448	1.5	78.05
1988 F	4	410	27	441	5	1	5	430	1.4	86-92
Lamb and mutton										
1985	7	358	36	401	1	2	13	385	1.4	68.61
1986	13	338	41	392	2	2	13	375	1.4	70.26
1987	13	315	44	372	1	2	8	360	1.3	78.08
1988 F	8	332	53	393	2	1	9	381	1.4	72-78
Total red meat										
1985	841	39,408	3,255	43,504	461	185	733	42,125	144.0	NA
1986	733	39,296	3,319	43,349	613	187	679	41,868	140.2	NA
1987	680	38,684	3,533	42,897	722	179	745	41,251	137.5	NA
1988 F	745	38,848	3,680	43,274	657	202	779	41,635	137.8	NA
Broilers										
1985	20	13,762	0	13,781	417	143	27	13,195	55.2	50.8
1986	27	14,316	0	14,342	566	149	24	13,603	56.3	56.9
1987	24	15,594	0	15,618	752	151	25	14,691	60.3	47.4
1988 F	25	16,371	0	16,396	770	140	25	15,461	62.8	47-53
Mature chicken										
1985	119	636	0	755	21	1	144	589	2.5	NA
1986	144	627	0	771	16	3	163	589	2.4	NA
1987	163	650	0	814	15	2	188	608	2.5	NA
1988 F	188	675	0	863	30	4	160	669	2.7	NA
Turkeys										
1985	125	2,942	0	3,067	27	7	150	2,884	12.0	75.5
1986	150	3,271	0	3,422	27	4	178	3,212	13.3	72.2
1987	178	3,828	0	4,006	33	4	282	3,686	15.1	57.8
1988 F	282	4,180	0	4,462	43	4	250	4,165	16.9	51-57
Total poultry										
1985	264	17,340	0	17,604	465	151	321	16,668	69.7	NA
1986	321	18,215	0	18,535	609	156	365	17,405	72.0	NA
1987	365	20,072	0	20,437	800	157	495	18,985	77.9	NA
1988 F	495	21,226	0	21,721	843	148	435	20,295	82.4	NA
Red meat & poultry										
1985	1,105	56,748	3,255	61,108	926	336	1,054	58,792	213.6	NA
1986	1,054	57,511	3,319	61,884	1,223	343	1,044	59,273	212.2	NA
1987	1,045	58,756	3,532	63,334	1,522	336	1,240	60,236	215.3	NA
1988 F	1,240	60,074	3,680	64,994	1,500	350	1,214	61,930	220.2	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry.
2/ Retail weight basis. (The beef carcass-to-retail conversion factor was changed from .74 to .73 beginning in 1986.)
3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry.
F = forecast. NA = not available.

Information contacts: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1285.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Shipments	Hatching use	Ending stocks	Consumption: Total	Consumption: Per capita	Wholesale price*
	Million dozen									No	Cts/doz
1983	20.3	5,659.2	23.4	5,702.9	85.8	26.6	500.0	9.3	5,081.2	259.8	75.2
1984	9.3	5,708.3	32.0	5,749.5	58.2	27.8	529.7	11.1	5,122.8	259.4	80.9
1985	11.1	5,688.0	12.7	5,711.8	70.6	30.3	548.1	10.7	5,052.0	253.4	66.4
1986	10.7	5,705.0	13.7	5,729.3	101.6	28.0	566.8	10.4	5,022.5	249.5	71.1
1987	10.4	5,796.5	5.6	5,811.7	111.2	25.1	595.3	14.0	5,066.9	249.5	61.6
1988 F	14.4	5,747.6	4.0	5,766.0	125.0	24.0	615.3	10.0	4,991.7	243.4	56-62

* Cartoned Grade A large eggs, New York. F = forecast.

Information contact: Robert Bishop (202) 786-1714.

Table 12.—U.S. Milk Supply & Use[1]

Calendar year	Production	Commercial: Farm use	Commercial: Farm marketings	Commercial: Beg. stocks	Imports	Total commercial supply	CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price 2/
	Billion pounds									$/cwt
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986	143.4	2.4	141.0	4.6	2.7	148.3	10.6	4.2	133.5	12.51
1987	142.5	2.2	140.3	4.2	2.5	146.9	6.7	4.6	135.6	12.54
1988 F	145.0	2.2	142.8	4.6	2.5	149.9	9.5	4.7	135.7	11.95

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry & Eggs

	Annual: 1985	Annual: 1986	Annual: 1987	1987: Apr	1987: Nov	1987: Dec	1988: Jan	1988: Feb	1988: Mar	1988: Apr
Broilers, federally inspected slaughter, certified (mil lb)	13,569.2	14,265.6	15,502.5	1,274.5	1,177.1	1,336.8	1,294.0	1,301.9	1,400.4	1,311.3
Wholesale price, 12-city, (cts/lb)	50.8	56.9	47.4	48.6	44.6	39.8	43.9	44.4	48.1	48.7
Price of grower feed ($/ton)	197	187	224	182	195	197	194	198	196	181
Broiler-feed price ratio 1/	3.1	3.7	3.7	3.2	2.7	2.5	2.8	2.6	2.8	3.1
Stocks beginning of period (mil lb)	19.7	26.6	23.9	25.1	27.3	24.1	24.8	31.0	32.4	35.5
Broiler-type chicks hatched (mil) 2/	4,803.8	5,013.3	535.1	455.7	423.1	469.7	464.5	431.7	482.8	470.2
Turkeys										
Federally inspected slaughter, certified (mil lb)	2,800	3,133	3,717	255.0	373.5	297.0	254.6	268.1	314.0	274.0
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts/lb)	75.5	72.2	57.8	58.3	60.7	66.5	52.8	47.1	47.0	46.9
Price of turkey grower feed ($/ton)	212	215	213	207	219	213	227	223	226	210
Turkey-feed price ratio 1/	4.5	4.1	3.9	3.5	3.1	3.6	2.8	2.6	2.5	2.7
Stocks beginning of period (mil lb)	125.3	150.2	178.2	226.0	629.9	321.5	282.4	299.3	335.1	353.3
Poults placed in U.S. (mil)	197.8	225.4	26.5	26.7	17.7	20.0	22.3	23.1	25.0	24.6
Eggs										
Farm production (mil)	68,256	68,459	69,558	5,792	5,803	6,016	5,980	5,607	5,964	5,656
Average number of layers (mil)	277	278	280	280	284	284	283	282	278	274
Rate of lay (eggs per layer on farms)	247	248	248	20.7	20.4	21.2	21.1	19.9	21.5	20.7
Cartoned price, New York, grade A large (cts/doz) 3/	66.4	71.1	61.6	62.4	60.5	56.9	55.9	52.7	56.4	52.1
Price of laying feed ($/ton)	182	174	170	166	168	168	176	177	175	175
Egg-feed price ratio 1/	6.3	7.0	7.6	6.6	6.4	5.8	5.6	5.3	5.8	5.2
Stocks, first of month										
Shell (mil doz)	.93	.72	1.16	.96	1.53	1.20	1.29	2.01	1.59	2.01
Frozen (mil doz)	10.2	10.0	9.8	11.0	13.6	13.2	13.1	13.9	13.9	10.7
Replacement chicks hatched (mil)	407	424	431	42.4	30.6	31.2	29.5	28.5	34.8	35.1

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 12 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Mark Weimar (202) 786-1714.

Table 14.—Dairy

	Annual			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Milk prices, Minnesota-Wisconsin, 3.5% fat ($/cwt) 1/	11.48	11.30	11.23	11.00	11.34	11.12	10.91	10.60	10.43	10.33
Wholesale prices										
Butter, Grade A Chi. (cts/lb)	141.1	144.5	140.2	138.8	135.6	134.0	131.9	131.0	131.0	131.0
Am. cheese, Wis. assembly pt. (cts/lb)	127.7	127.3	123.2	122.4	121.3	120.7	118.4	116.1	115.6	115.1
Nonfat dry milk, (cts/lb) 2/	84.0	80.6	79.3	79.0	77.6	77.0	79.8	73.0	73.0	73.1
USDA net removals										
Total milk equiv. (mil lb) 3/	13,174.1	10,628.1	6,706.0	598.8	429.3	746.4	1,628.4	1,486.5	1,091.9	1,235.8
Butter (mil lb)	334.2	287.6	187.3	13.6	10.9	18.7	56.4	59.7	36.1	42.7
Am. cheese (mil lb)	629.0	468.4	282.0	32.0	20.4	36.1	46.6	25.4	34.7	35.6
Nonfat dry milk (mil lb)	940.6	827.3	559.4	61.0	24.2	42.4	48.1	39.6	49.8	49.2
Milk										
Milk prod. 21 States (mil lb)	121,043	121,433	121,094	10,381	9,572	10,038	10,205	9,740	10,647	10,593
Milk per cow (lb)	13,160	13,399	13,932	1,191	1,107	1,158	1,177	1,126	1,234	1,229
Number of milk cows (thou)	9,198	9,063	8,692	8,713	8,647	8,667	8,667	8,649	8,630	8,618
U.S. milk production (mil lb)	143,147	143,381	142,462	6/12,248	6/11,264	6/11,808	6/12,042	6/11,493	6/12,563	6/12,456
Stock, beginning										
Total (mil lb)	16,704	13,695	12,867	13,325	8,804	8,147	7,371	7,628	8,462	10,787
Commercial (mil lb)	4,937	4,590	4,165	4,452	5,026	4,696	4,577	4,777	4,910	5,074
Government (mil lb)	11,767	9,105	8,702	8,873	3,779	3,451	2,794	2,852	3,552	5,712
Imports, total (mil lb) 3/	2,777	2,733	2,490	167	279	249	235	196	172	NA
Commercial disappearance milk equiv. (mil lb)	130,640	133,497	135,630	11,273	11,263	11,243	10,262	9,895	11,292	NA
Butter										
Production (mil lb)	1,247.8	1,202.4	1,104.1	102.6	87.9	108.5	124.7	117.1	116.3	111.7
Stocks, beginning (mil lb)	296.5	205.5	193.0	247.9	165.6	158.5	143.2	157.3	198.3	221.1
Commercial disappearance (mil lb)	918.2	922.9	902.5	84.7	85.0	81.3	65.6	52.0	73.7	NA
American cheese										
Production (mil lb)	2,855.2	2,798.2	2,716.6	245.2	207.4	232.6	225.8	221.0	244.6	251.8
Stocks, beginning (mil lb)	450.9	408.6	370.4	615.4	450.9	408.6	370.4	365.7	362.0	365.4
Commercial disappearance (mil lb)	2,279.1	2,382.8	2,444.1	190.6	196.5	227.4	173.5	196.7	209.0	NA
Other cheese										
Production (mil lb)	2,225.7	2,411.1	2,627.6	216.8	224.4	237.2	207.0	207.8	239.3	221.3
Stocks, beginning (mil lb)	101.4	94.1	92.0	89.4	96.8	92.6	89.7	90.0	88.4	89.0
Commercial disappearance (mil lb)	2,515.7	2,684.9	2,880.1	229.8	260.3	262.5	224.3	224.8	254.6	NA
Nonfat dry milk										
Production (mil lb)	1,390.0	1,284.1	1,059.0	107.7	65.5	90.0	83.8	85.8	95.8	102.6
Stocks, beginning (mil lb)	1,247.6	1,011.1	686.8	512.9	200.4	188.0	177.2	130.7	152.2	151.1
Commercial disappearance (mil lb)	435.0	479.1	495.1	42.1	41.3	28.1	44.0	39.7	53.4	NA
Frozen dessert										
Production (mil gal) 4/	1,251.0	1,248.6	1,263.4	111.7	80.3	82.4	76.0	87.6	110.4	107.9

	Annual			1986		1987				1988
	1985	1986	1987	III	IV	I	II	III	IV	I P
Milk production (mil lb)	143,147	143,381	142,462	35,459	33,716	34,814	37,399	35,512	34,737	36,098
Milk per cow (lb)	12,994	13,260	13,786	3,325	3,199	3,340	3,617	3,453	3,375	3,509
No. of milk cows (thou)	11,016	10,813	10,334	10,664	10,541	10,424	10,339	10,283	10,291	10,286
Milk-feed price ratio 5/	1.72	1.73	1.83	1.72	1.91	1.88	1.76	1.80	1.89	1.74
Returns over concentrate costs ($/cwt milk) 5/	9.54	9.23	9.50	8.97	10.10	9.82	8.99	9.26	9.97	9.26

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Based on average milk price after adjustment for price-support deductions. 6/ Estimated. NA = not available. P = preliminary.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
U.S. wool price, Boston 1/ (cts/lb)	192	191	265	260	300	300	315	397	435	453
Imported wool price, Boston 2/ (cts/lb)	197	201	247	248	274	278	295	330	370	441
U.S. mill consumption, scoured										
Apparel wool (thou lb)	106,051	126,768	129,677	10,881	9,556	11,173	10,106	10,103	13,514	10,061
Carpet wool (thou lb)	10,562	9,960	13,092	1,209	1,063	708	1,323	1,418	1,786	1,344

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4'' and up. 2/ Wool price delivered at U.S.-mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Cattle on feed (7 States)										
Number on feed (thou head) 1/	8,635	7,920	7,643	7,232	8,364	8,412	8,066	7,856	7,572	7,726
Placed on feed (thou head)	19,346	20,035	21,020	1,681	1,609	1,350	1,660	1,369	1,833	1,531
Marketings (thou head)	18,989	19,263	19,390	1,541	1,458	1,577	1,759	1,527	1,573	1,614
Other disappearance (thou head)	1,132	1,049	1,207	139	103	119	111	126	106	139
Beef steer-corn price ratio, Omaha 2/	23.3	31.0	41.0	42.3	38.4	36.7	36.4	37.4	38.4	39.3
Hog-corn price ratio, Omaha 2/	17.8	27.8	33.7	32.7	24.3	23.8	25.0	25.7	23.0	22.5
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, Omaha	58.37	57.75	64.60	66.30	64.20	63.93	65.00	68.31	71.53	72.71
Utility cows, Omaha	38.32	37.19	44.83	44.23	44.83	46.69	47.83	49.55	49.83	49.41
Choice vealers, S. St. Paul	58.28	59.92	78.74	75.00	82.50	83.00	86.88	87.50	87.50	96.41
Feeder cattle										
Choice, Kansas City, 600-700 lb.	64.56	62.79	75.36	72.90	79.50	78.90	85.00	83.53	85.20	86.50
Slaughter hogs										
Barrows & gilts, 7-markets	44.77	51.19	51.69	51.85	40.65	41.14	44.43	47.01	42.79	42.10
Feeder pigs										
S. Mo. 40-50 lb. (per head)	37.20	45.62	46.69	56.00	36.56	31.74	37.47	44.80	48.65	52.16
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.61	69.46	78.09	93.12	65.00	73.83	83.53	77.25	83.75	76.50
Ewes, Good, San Angelo	34.02	34.78	38.62	39.05	37.83	39.88	43.19	38.25	41.17	40.17
Feeder lambs										
Choice, San Angelo	85.91	73.14	102.26	109.40	99.50	105.83	113.63	112.63	111.30	100.25
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	90.76	88.98	97.21	100.56	95.34	94.50	97.15	99.50	103.47	105.25
Canner & cutter cow beef	74.13	71.31	83.70	82.19	83.41	88.45	88.98	92.18	90.33	89.69
Pork loins, 8-14 lb. 3/	91.51	104.78	106.23	102.21	80.35	84.70	102.43	94.93	87.82	94.03
Pork bellies, 12-14 lb.	59.50	65.82	63.11	65.79	45.86	42.60	51.82	48.40	45.32	43.13
Hams, skinned, 14-17 lb.	67.50	80.01	80.96	72.66	96.36	91.98	66.70	76.67	78.35	68.27
All fresh beef retail price 4/	NA	NA	212.64	208.91	218.57	218.53	213.95	217.58	219.97	219.68
Commercial slaughter (thou head)*										
Cattle	36,293	37,288	35,647	2,971	2,751	2,899	2,921	2,758	2,896	2,784
Steers	16,912	17,516	17,443	1,523	1,314	1,425	1,464	1,400	1,436	1,448
Heifers	11,237	11,097	10,906	855	817	868	891	815	894	823
Cows	7,391	7,960	6,608	534	570	555	519	495	512	462
Bulls & stags	758	715	690	59	51	51	47	48	54	51
Calves	3,385	3,408	2,836	226	222	252	214	210	223	176
Sheep & lambs	6,165	5,635	5,198	496	412	451	390	416	548	404
Hogs	84,492	79,598	81,090	6,667	7,321	7,813	6,977	6,682	7,680	7,090
Commercial production (mil lb)										
Beef	23,557	24,213	23,406	1,928	1,828	1,924	1,943	1,828	1,925	1,842
Veal	499	509	422	34	32	36	32	32	33	28
Lamb & mutton	352	331	309	29	25	28	24	26	35	26
Pork	14,728	13,988	14,314	1,170	1,312	1,390	1,244	1,183	1,360	1,263

	Annual			1986	1987				1988	
	1985	1986	1987	IV	I	II	III	IV	I	II
Cattle on feed (13 States)										
Number on feed (thou head) 1/	10,653	9,754	9,245	8,197	9,245	8,807	8,666	8,992	9,769	9,365
Placed on feed (thou head)	23,366	23,583	24,874	6,756	5,680	5,906	6,590	6,698	5,796	NA
Marketings (thou head)	22,887	22,856	22,971	5,396	5,747	5,619	6,022	5,583	5,810	6/5,931
Other disappearance (thou head)	1,378	1,236	1,379	312	371	428	242	338	390	NA
Hogs & pigs (10 States) 5/										
Inventory (thou head) 1/	42,420	41,100	39,690	39,585	39,690	38,370	40,880	43,075	42,275	40,495
Breeding (thou head) 1/	5,348	5,258	5,110	4,895	5,110	5,215	5,325	5,300	5,400	5,420
Market (thou head) 1/	37,072	35,842	34,580	34,690	34,580	33,155	35,555	37,775	36,875	35,075
Farrowings (thou head)	8,831	8,223	8,783	2,115	1,967	2,352	2,257	2,258	2,030	6/2,399
Pig crop (thou head)	67,648	63,835	68,417	16,460	14,840	18,601	17,481	17,495	15,765	NA

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Beginning January 1984 prices are for 14-17 lb.; January 1986 prices are for 14-18 lb. 4/ New series estimating the composite price of all beef grades and ground beef sold by retail stores. This new series in addition to but does not replace the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 6/ Intentions. *Classes estimated. NA = not available.

Information contacts: Ron Gustafson or Leland Southard (202) 786-1285.

Table 17.—Supply & Utilization[1,2]

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			Bu/acre	Mil. bu							$/bu
Wheat												
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.51
1984/85	18.3	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86	18.8	75.6	64.7	37.5	2,425	3,866	279	767	915	1,961	1,905	3.08
1986/87*	20.4	72.1	60.7	34.4	2,092	4,018	408	785	1,004	2,197	1,821	2.42
1987/88*	20.2	65.8	55.9	37.6	2,105	3,941	300	805	1,600	2,705	1,236	2.55
1988/89*	--	--	--	--	2,120	3,371	250	870	1,500	2,590	781	2.90-3.30
	Mil. acres			Lb/acre	Mil. cwt (rough equiv.)							$/cwt
Rice												
1983/84	1.74	2.19	2.17	4,598	99.7	172.1	--	6/54.9	70.3	125.0	46.9	8.57
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87*	1.27	2.38	2.36	5,651	133.4	213.3	--	6/76.3	85.4	161.7	51.6	3.75
1987/88*	1.26	2.35	2.33	5,482	127.7	182.3	--	6/80.8	70.0	150.8	31.5	7.00-7.25
1988/89*	--	--	--	--	157.0	191.7	--	6/83.5	77.0	160.5	31.2	5.00-7.00
	Mil. acres			Bu/acre	Mil. bu							$/bu
Corn												
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87*	13.6	76.7	69.2	119.3	8,250	12,291	4,714	1,192	1,504	7,410	4,882	1.50
1987/88*	21.6	65.7	59.2	119.4	7,064	11,948	4,900	1,236	1,700	7,836	4,112	1.65-1.85
1988/89*	--	--	--	--	7,300	11,415	5,000	1,275	1,750	8,025	3,390	1.65-2.00
	Mil. acres			Bu/acre	Mil. bu							$/bu
Sorghum												
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87*	2.3	15.3	13.9	67.7	938	1,489	545	15	198	758	732	1.37
1987/88*	3.8	11.8	10.6	69.9	741	1,472	550	15	225	790	682	1.50-1.65
1988/89*	--	--	--	--	650	1,332	500	15	210	725	607	1.55-1.85
	Mil. acres			Bu/acre	Mil. bu							$/bu
Barley												
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87*	1.8	13.1	12.0	50.8	611	942	296	174	137	606	336	1.61
1987/88*	2.9	11.0	10.0	52.6	527	878	275	175	130	580	298	1.83
1988/89*	--	--	--	--	500	813	265	175	100	540	273	1.70-2.00
	Mil. acres			Bu/acre	Mil. bu							$/bu
Oats												
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87*	.4	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88*	1.0	18.0	6.9	54.0	374	547	350	75	1	426	121	1.57
1988/89*	--	--	--	--	450	596	380	80	1	461	135	1.25-1.45
	Mil. acres			Bu/acre	Mil. bu							$/bu
Soybeans												
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/79	983	743	1,805	176	7.83
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87*	0	60.4	58.3	33.3	1,940	2,476	7/104	1,179	757	2,040	436	4.78
1987/88*	0	57.4	56.4	33.7	1,905	2,341	7/96	1,170	800	2,066	275	5.90
1988/89*	0	--	--	--	1,880	2,155	--	1,155	750	2,010	155	5.75-7.75
								Mil. lbs				8/ Cts/lb
Soybean oil												
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.60
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.50
1985/86	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.00
1986/87*	--	--	--	--	12,783	13,745	--	10,833	1,187	12,020	1,725	15.40
1987/88*	--	--	--	--	12,878	14,605	--	11,000	2,205	13,205	1,400	21.00
1988/89*	--	--	--	--	12,710	14,120	--	11,200	1,700	12,900	1,210	20.00-25.00
								Thou. tons				9/ $/ton
Soybean meal												
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,975	255	188
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87*	--	--	--	--	27,758	27,970	--	20,387	7,343	27,730	240	163
1987/88*	--	--	--	--	28,010	28,050	--	21,050	6,700	27,750	300	210
1988/89*	--	--	--	--	27,500	27,800	--	21,000	6,500	27,500	300	190-240

See footnotes at end of table.

Table 17.— Supply & Utilization, continued

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			Lb/acre	Mil. bales							Cts/lb
Cotton 10/												
1983/84	6.8	7.9	7.3	508	7.8	15.7	--	5.9	6.8	12.7	2.8	65.30
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.70
1985/86	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	56.50
1986/87*	3.4	10.0	8.5	552	9.7	19.1	--	7.4	6.7	14.1	5.0	52.40
1987/88*	3.3	10.4	10.0	706	14.8	19.8	--	7.8	6.6	14.4	5.6	64.20
1988/89*	--	--	--	--	14.0	19.6	--	7.2	5.7	12.9	6.8	--

*June 9, 1988 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum. October 1 for soymeal, and soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres. 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1987		1988			
	1983/84	1984/85	1985/86	1986/87	Apr	Dec	Jan	Feb	Mar	Apr
Wholesale prices										
Wheat, No. 1 HRW, Kansas City ($/bu) 2/	3.84	3.74	3.28	2.72	2.90	3.70	3.20	3.28	3.10	3.14
Wheat, DNS, Minneapolis ($/bu) 2/	4.21	3.70	3.25	2.62	2.60	2.96	3.12	3.26	3.05	3.19
Rice, S.W. La. ($/cwt) 3/	19.38	17.98	16.11	10.25	10.40	19.70	20.60	24.45	24.50	24.00
Wheat										
Exports (mil bu)	1,429	1,424	915	1,004	73	118	148	147	151	NA
Mill grind (mil bu)	701	676	703	755	61	62	59	58	62	NA
Wheat flour production (mil cwt)	308	301	314	335	27	28	26	26	27	NA
Rice										
Exports (mil cwt, rough equiv)	70.3	62.1	58.7	85.4	5.9	4.5	5.9	4.3	5.9	NA

	Marketing year 1/			1986	1987				1988	
	1984/85	1985/86	1986/87	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May
Wheat										
Stocks, beginning (mil bu)	1,399	1,425	1,905	3,154.6	2,671.5	2,249.8	1,820.9	2,988.5	2,505.3	1,908.5
Domestic use:										
Food (mil bu)	651	683	714	192.2	177.2	180.3	184.9	196.1	175	NA
Feed & seed (mil bu) 4/	502	363	548	31.1	47.6	38.7	345.5	-17.7	13	NA
Exports (mil bu)	1,424	915	1,004	263.4	202.7	216.8	409.9	308.5	412	NA

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Ed Allen and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1987		1988			
	1983/84	1984/85	1985/86	1986/87	Apr	Dec	Jan	Feb	Mar	Apr
U.S. price, SLM, 1-1/16 in. (cts/lb) 2/	73.1	60.5	60.0	53.2	57.7	62.3	59.7	57.8	59.6	60.1
Northern Europe prices:										
Index (cts/lb) 3/	87.6	69.2	48.9	62.0	66.2	75.3	72.2	67.5	66.3	65.8
U.S. M 1-3/32 in. (cts/lb) 4/	87.1	73.9	64.8	61.8	65.2	75.0	72.8	69.8	70.8	72.4
U.S. mill consumption (thou bales)	5,927	5,545	6,399	7,452	661	645	621	649	706	613
Exports (thou bales)	6,786	6,201	1,969	6,684	660	721	663	740	779	592
Stocks, beginning (thou bales)	7,937	2,775	4,102	9,348	9,749	11,946	12,836	12,477	11,273	9,788

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) Index; average of 5 lowest priced of 11 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1987		1988			
	1983/84	1984/85	1985/86	1986/87	Apr	Dec	Jan	Feb	Mar	Apr
Wholesale prices										
Corn, No. 2 yellow, Chicago ($/bu)	3.46	2.79	2.35	1.64	2.03	1.89	1.95	2.01	2.03	1.69
Sorghum, No. 2 yellow, Kansas City ($/cwt)	5.22	4.46	3.72	2.73	2.85	2.95	3.05	3.24	3.27	3.16
Barley, feed, Duluth ($/bu) 2/	2.48	2.09	1.53	1.44	1.76	1.74	1.72	1.77	1.88	1.94
Barley, malting, Minneapolis ($/bu)	2.84	2.55	2.24	1.89	2.05	2.01	2.02	2.15	2.08	2.11
Exports										
Corn (mil bu)	1,902	1,865	1,241	1,504	184.3	149	134	125	165.3	NA
Feed grains (mil metric tons) 3/	56.5	56.6	36.6	46.3	5.4	4.2	4.1	4.0	5.2	NA

	Marketing year 1/				1987				1988	
	1983/84	1984/85	1985/86	1986/87	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May
Corn										
Stocks, beginning (mil bu)	3,523	1,006	1,648	4,040	10,306	8,248	6,332	4,882	9,769	7,632
Domestic use:										
Feed (mil bu)	3,818	4,079	4,095	4,717	1,472	1,091	768	1,488	1,451	NA
Food, seed, ind. (mil bu)	975	1,091	1,160	1,191	270	325	315	292	277	NA
Exports (mil bu)	1,902	1,865	1,241	1,504	315	500	368	398	410	NA
Total use (mil bu)	6,694	7,036	6,496	7,410	2,058	1,917	1,451	2,178	2,138	NA

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Aggregated data for corn, sorghum, oats, and barley. NA = not available.

Information contact: James Cole (202) 786-1840.

Table 21.—Fats & Oils

	Marketing year 1/				1987			1988		
	1983/84	1984/85	1985/86	1986/87	Mar	Nov	Dec	Jan	Feb	Mar
Soybeans										
Wholesale price, No. 1 yellow, Chicago ($/bu) 2/	7.78	5.88	5.20	5.03	4.86	5.53	5.85	6.13	6.14	6.24
Crushings (mil bu)	982.7	1,030.5	1,052.8	1,178.8	106.0	111.2	110.8	106.7	99.8	108.3
Exports (mil bu)	742.8	600.7	740.7	756.9	67.8	98.1	76.7	77.0	97.0	74.8
Stocks, beginning (mil bu)	344.6	175.7	316.0	536.0	105.4	158.5	155.5	145.0	141.8	139.3
Soybean oil										
Wholesale price, crude, Decatur (cts/lb)	30.55	29.52	18.02	15.36	15.21	17.55	19.00	21.98	20.94	20.22
Production (mil lb)	10,862.8	11,467.9	11,617.3	12,783.1	1,149.0	1,207.1	1,208.1	1,170.2	1,091.8	1,187.0
Domestic disap. (mil lb)	9,589.6	9,888.5	10,045.9	10,820.1	761.6	895.1	857.3	804.0	962.9	924.4
Exports (mil lb)	1,813.7	1,659.9	1,257.3	1,184.5	52.1	139.0	134.0	25.7	281.0	273.7
Stocks, beginning (mil lb)	1,260.9	720.5	632.5	946.6	2,017.0	1,660.6	1,833.7	2,050.5	2,390.9	2,238.9
Soybean meal										
Wholesale price, 44% protein, Decatur ($/ton)	188.21	125.46	154.88	162.61	146.60	206.60	214.80	193.75	183.00	191.80
Production (thou ton)	22,756.2	24,529.9	24,951.3	27,758.8	2,489.1	2,667.8	2,649.3	2,554.4	2,377.1	2,573.3
Domestic disap. (thou ton)	17,538.8	19,481.3	19,117.2	20,387.4	1,538.4	2,113.9	2,012.6	1,825.2	1,475.8	1,649.8
Exports (thou ton)	5,436.1	4,916.5	6,009.3	7,343.0	992.4	509.7	652.3	635.0	986.9	984.7
Stocks, beginning (thou ton)	474.1	255.4	386.9	211.7	277.5	267.6	311.8	296.2	390.4	304.9
Margarine, wholesale price, Chicago, white (cts/lb)	46.3	55.5	51.2	40.3	39.20	42.65	44.20	46.75	46.00	45.80

1/ Beginning September 1 for soybeans; October 1 for soymeal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates: Deficiency	Payment rates: Paid land diversion	Payment rates: PIK	Base acres	Program 1/	Participation rate 2/
			$/bu.			Percent 3/	Mil. acres		Percent of base
Wheat									
1983/84	4.30	3.65		.65	2.70	95	90.9	15/5/10-30	78/78/51
1984/85	4.38	3.30		1.00	2.70	85	94.0	20/10/10-20	60/60/20
1985/86	4.38	3.30		1.08	2.70		94.0	20/10/0	73
1986/87 4/	4.38	3.00	2.40	1.98	2.00	1.10	92.2	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.78			91.6	27.5/0/0	87
1988/89	4.23	2.76	2.21	1.53				27.5/0/0	
1989/90								10/0/0	
			$/cwt						
Rice									
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/98/87
1984/85	11.90	8.00		3.76			4.16	25/0/0	85
1985/86	11.90	8.00	5/3.16	3.90	3.50		4.23	20/15/0	89
1986/87 4/	11.90	7.20	5/3.82	4.70			4.20	35/0/0	92
1987/88	11.66	6.84	5/5.75	4.82			4.20	35/0/0	97
1988/89	11.15	6.63	5/7.00	1.65			4.22	25/0/0	85
			$/bu.						
Corn									
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 4/	3.03	2.40	1.92	1.11	.73		81.9	17.5/2.5/0	85
1987/88	3.03	2.28	1.82	1.21	2.00		83.3	20/15/0	88/55
1988/89	2.93	2.21	1.77	1.10	1.75			20/10/0; 0/92	
			$/bu.						
Sorghum									
1983/84	2.72	2.52		0	1.50	80	18.0	6/ (same)	72/72/53
1984/85	2.88	2.42		.46			18.2		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 4/	2.88	2.28	1.82	1.06	.65		18.7		75
1987/88	2.88	2.18	1.74	1.14	1.90		18.1		83/42
1988/89	2.78	2.10	1.68	1.08	1.65				
			$/bu.						
Barley									
1983/84	2.60	2.16		.21	1.00		11.0	6/ (same)	55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 4/	2.60	1.95	1.56	1.04	.57		12.4		73
1987/88	2.60	1.86	1.49	1.11	1.60		12.9		82/23
1988/89	2.51	1.80	1.44	.76	1.40				
			$/bu.						
Oats									
1983/84	1.60	1.36		.11	.75		9.8	6/ (same)	20/20/0
1984/85	1.60	1.31		0			9.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 4/	1.60	1.24	.99	.50	.36		9.5		37
1987/88	1.60	1.18	.94	.55	.80		8.7		44/15
1988/89	1.55	1.13	.90	.30				5/0/0; 0/92	
			$/bu.						
Soybeans 7/									
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 4/		4.77							
1987/88		4.77							
1988/89									
			Cts/lb.						
Upland cotton									
1983/84	76.0	55.00		12.10	25.00	85	15.4	20/5/10-30	93/93/77
1984/85	81.0	55.00		18.60			15.6	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.8	20/10/0	82/0/0
1986/87 4/	81.0	55.00	8/44.00	26.00			15.5	25/0/0	93
1987/88	79.4	52.25	9/	17.3			15.3	25/0/0	92
1988/89	75.9	51.80		16.00			15.0	12.5/0/0	

1/ Percentage of base acres farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 2/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 3/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 and 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 4/ Payment rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 5/ Annual average world market price. 6/ The sorghum, oats and barley programs were the same as for corn each year except 1983/84, when PIK was not offered on barley and oats, and in 1988 for oats. 7/ There are no target prices, acreage programs, or payment rates for soybeans. 8/ Loan repayment rate. 9/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: James Cole (202) 786-1840.

Table 23.—Fruit

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 P
Citrus 1/												
Production (thou ton)	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488	11,074	11,952	12,796
Per capita consumption (lbs) 2/	117.2	124.5	107.4	108.5	112.7	104.7	109.6	120.2	102.8	115.7	109.8	NA
Non citrus 3/												
Production (thou tons)	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,292	14,188	13,916	15,333
Per capita consumption (lbs) 2/	84.2	84.3	82.5	85.8	87.3	88.1	89.0	89.0	93.7	92.6	95.3	NA

	1987								1988			
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
F.O.B. shipping point prices												
Apples ($/carton) 4/	16.63	17.60	14.34	11.60	NA	7.93	7.83	8.98	7.75	11.50	11.08	10.96
Pears ($/box) 5/	15.28	21.00	NA	NA	NA	12.00	10.82	9.70	9.26	11.18	8.94	12.88
Oranges ($/box) 6/	5.62	6.47	6.29	6.18	6.01	7.36	10.23	5.45	6.19	6.24	5.99	6.42
Grapefruit ($/box) 6/	4.94	4.34	5.58	5.95	5.07	5.07	6.81	5.84	5.34	5.25	4.86	4.50
Stocks, ending												
Fresh apples (mil lbs)	386.3	203.8	74.9	4.2	2,687.1	5,390.2	4,697.2	3,311.6	3,158.9	2,417.4	1,584.1	1,092.7
Fresh pears (mil lbs)	21.1	1.7	11.8	195.2	507.1	425.8	338.8	279.4	198.4	148.4	99.7	49.2
Frozen fruits (mil lbs)	510.6	625.9	865.7	908.3	908.7	957.9	943.1	858.2	790.4	720.1	634.6	590.1
Frozen orange juice (mil lbs)	1,109.1	1,105.1	942.1	792.6	840.0	652.8	569.0	662.4	980.4	1,073.1	1,004.1	948.5

1/ Crop year beginning with year indicated. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar year. 4/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 5/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 6/ U.S. equivalent on-tree returns. P = preliminary. NA = not available.

Information contact: Ben Huang (202) 786-1885.

Table 24.—Vegetables

	Calendar years									
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Production										
Total vegetables (1,000 cwt) 1/	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436	462,402
Fresh (1,000 cwt) 1/ 2/	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,932	216,267	218,190
Processed (tons) 3/	9,980,100	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860	11,616,560	12,210,580
Mushrooms (1,000 lbs)	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA	NA
Potatoes (1,000 cwt)	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	361,511	385,774
Sweetpotatoes (1,000 cwt)	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674	12,103
Dry edible beans (1,000 cwt)	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,886	26,309

	1987									1988			
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Shipments													
Fresh (1,000 cwt) 4/	20,011	23,887	35,745	23,791	17,075	20,213	16,104	15,445	18,964	17,690	18,523	18,208	19,103
Potatoes (1,000 cwt)	13,560	12,165	12,622	7,631	8,514	11,384	9,718	11,021	10,685	11,759	10,485	11,107	14,970
Sweetpotatoes (1,000 cwt)	299	177	98	34	136	322	359	795	518	281	274	435	218

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop; all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contacts: Shannon Hamm or Cathy Greene (202) 786-1884.

Table 25.—Other Commodities

	Annual					1987				1988
	1983	1984	1985	1986	1987	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar
Sugar										
Production 1/	5,682	5,890	5,969	6,257	7,278	2,024	766	866	3,622	2,090
Deliveries 1/	8,812	8,454	8,035	7,786	8,167	1,908	2,001	2,146	2,112	1,951
Stocks, ending 1/	2,570	3,005	3,126	3,227	965	3,497	2,476	1,497	965	3,610
Coffee										
Composite green price N.Y. (cts/lb)	131.51	142.95	137.46	185.18	109.14	115.38	105.91	99.16	116.12	121.98 P
Imports, green bean equiv. (mil lbs) 2/	2,259	2,411	2,550	2,596	2,638	563	790	645	640	585 P

	Annual			1987					1988	
	1985	1986	1987 P	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Tobacco										
Prices at auctions 3/										
Flue-cured ($/lb)	1.72	1.52	NA	NQ	1.65	1.66	1.42	NQ	NQ	NQ
Burley ($/lb)	1.59	1.57	NA	1.39	NQ	NQ	1.58	1.58	1.51	1.51
Domestic consumption 4/										
Cigarettes (bil)	594.0	584.0	577.0	42.7	51.0	48.6	52.6	48.5	32.4	46.1
Large cigars (mil)	3,226	3,090	2,757	213.4	253.7	250.7	213.6	220.2	151.4	192.6

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. P = preliminary. NA = not available. NQ = no quote.

Information contacts: (sugar) Peter Buzzaneil (202) 786-1888; (coffee) Fred Gray (202) 786-1888; (tobacco) Verner Grise (202) 786-1890.

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88 P	1988/89 F
				Million units			
Wheat							
Area (hectare)	237.3	228.8	231.0	229.3	228.0	220.0	
Production (metric ton)	477.3	489.3	511.8	499.8	529.7	504.8	521.5
Exports (metric ton) 1/	98.7	102.0	107.0	85.0	90.7	103.8	100.6
Consumption (metric ton) 2/	460.1	474.1	492.8	495.7	521.7	534.2	535.7
Ending stocks (metric ton) 3/	130.0	145.2	164.2	168.2	176.1	146.7	133.0
Coarse grains							
Area (hectare)	338.7	334.6	334.2	340.8	336.6	323.3	
Production (metric ton)	783.9	687.2	814.1	841.8	833.8	787.5	805.1
Exports (metric ton) 1/	90.0	93.4	100.4	83.2	83.4	83.4	86.4
Consumption (metric ton) 2/	753.3	758.3	781.4	778.4	808.9	813.2	825.1
Ending stocks (metric ton) 3/	181.4	110.3	143.1	207.8	232.6	207.0	186.9
Rice, milled							
Area (hectare)	140.6	144.3	144.4	144.9	145.1	142.1	
Production (metric ton)	286.5	308.6	319.0	319.1	317.9	304.1	325.0
Exports (metric ton) 4/	11.9	12.6	11.5	12.8	12.7	10.9	
Consumption (metric ton) 2/	286.5	305.1	311.0	320.2	322.2	313.5	325.7
Ending stocks (metric ton) 3/	43.3	46.7	54.8	53.8	49.5	40.2	39.5
Total grains							
Area (hectare)	716.6	707.7	709.6	715.0	709.7	685.4	
Production (metric ton)	1,547.7	1,485.1	1,644.9	1,660.7	1,681.4	1,596.4	1,651.6
Exports (metric ton) 1/	200.6	208.0	218.9	181.0	186.8	198.1	
Consumption (metric ton) 2/	1,499.9	1,537.5	1,584.8	1,593.7	1,652.8	1,660.9	1,686.5
Ending stocks (metric ton) 3/	354.7	302.2	362.9	429.8	458.2	393.9	359.4
Oilseeds							
Crush (metric ton)	143.5	135.8	150.6	154.5	160.8	165.9	
Production (metric ton)	178.2	165.0	191.1	195.9	194.3	205.0	208.0
Exports (metric ton)	35.2	33.0	33.1	34.4	37.6	39.1	
Ending stocks (metric ton)	20.5	15.7	21.1	26.7	23.3	21.1	
Meals							
Production (metric ton)	98.1	92.5	101.8	104.6	109.8	113.3	
Exports (metric ton)	31.6	29.7	32.3	34.3	36.4	36.3	
Oils							
Production (metric ton)	43.4	42.1	46.1	49.3	50.3	52.1	
Exports (metric ton)	14.0	13.7	15.5	16.3	16.9	17.6	
Cotton							
Area (hectare)	31.4	31.0	33.9	31.9	30.0	32.6	
Production (bale)	68.1	65.6	88.2	79.6	70.4	79.8	83.5
Exports (bale)	19.5	19.2	20.2	20.4	26.1	23.8	23.0
Consumption (bale)	68.3	68.3	70.0	75.7	82.2	82.2	82.5
Ending stocks (bale)	25.2	23.9	42.3	47.1	34.6	32.5	33.2
	1982	1983	1984	1985	1986	1987 P	1988 F
Red meat							
Production (mil metric tons)	94.8	97.5	99.3	103.3	105.6	105.4	107.1
Consumption (mil metric tons)	93.3	95.8	97.4	101.2	104.7	103.8	105.9
Exports (mil metric tons) 1/	5.8	5.9	5.9	6.2	6.6	6.5	6.7
Poultry							
Production (mil metric tons)	23.7	24.4	25.2	26.2	27.3	29.0	30.2
Consumption (mil metric tons)	23.3	24.3	24.8	25.9	26.9	28.5	29.8
Exports (mil metric tons) 1/	1.4	1.3	1.3	1.2	1.3	1.4	1.4
Dairy							
Milk production (mil metric tons)	396.9	413.0	413.4	417.8	423.9	419.0	421.5

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1983 data correspond with 1982/83, etc. P = preliminary. F = forecast.

Information contacts: Frederic Surls (202) 786-1824; (red meat & poultry) Linda Bailey (202) 786-1286; (dairy) Sara Short (202) 786-1769.

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1987			1988			
	1985	1986	1987	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu)	3.73	3.19	3.11	3.13	3.17	3.43	3.53	3.60	3.42	3.47
Corn, f.o.b. vessel, Gulf ports ($/bu)	2.89	2.27	1.95	1.93	2.10	2.13	2.22	2.24	2.30	2.29
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu)	2.64	2.16	1.88	1.86	2.01	1.98	2.06	2.13	2.17	2.09
Soybeans, f.o.b. vessel, Gulf ports ($/bu)	5.83	5.45	5.55	5.35	5.88	6.16	6.45	6.46	6.55	6.92
Soybean oil, Decatur (cts/lb)	27.03	16.36	15.85	15.03	17.16	18.77	21.64	20.79	20.08	21.49
Soybean meal, Decatur ($/ton)	127.15	157.62	175.57	158.48	209.45	214.51	193.30	184.39	191.01	199.98
Cotton, 8 market avg. spot (cts/lb)	58.55	53.47	64.35	57.72	64.81	62.25	59.70	57.83	59.66	60.07
Tobacco, avg. price at auction (cts/lb)	172.05	153.93	146.50	141.34	152.38	152.61	150.08	149.27	149.27	141.22
Rice, f.o.b. mill, Houston ($/cwt)	18.49	14.60	13.15	10.50	21.00	21.00	21.00	24.50	24.06	24.00
Inedible tallow, Chicago (cts/lb)	14.33	9.03	13.79	12.98	15.17	15.56	18.00	17.08	17.25	16.17
Import commodities										
Coffee, N.Y. spot ($/lb)	1.42	2.01	1.09	1.02	1.19	1.19	1.19	1.28	1.27	1.23
Rubber, N.Y. spot (cts/lb)	41.91	42.87	50.65	47.39	53.10	54.01	54.59	53.75	54.92	55.68
Cocoa beans, N.Y. ($/lb)	.99	.88	.87	.90	.84	.82	.86	.78	.73	.71

Information contact: Mary Teymourian (202) 786-1820.

Table 28.—Indexes of Nominal & Real Trade-Weighted Dollar Exchange Rates

	1987							1988				
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
						March 1973=100						
Total U.S. trade 1/												
Nominal	98	99	99	97	97	92	90	91*	91*	90*	89*	90*
						April 1971=100						
Agricultural trade												
Nominal 2/	12,507	14,245	14,933	15,794	16,859	18,559	21,384	24,555	28,566	33,610	38,783	46,513
Real 3/	85	85	85	84	83	81	80*	80*	80*	79*	78*	78*
Soybeans												
Nominal 2/	394	412	428	444	460	491	600	596	606	612	611	612
Real 3/	70	71	71	69	69	66	65*	64*	64*	64*	63*	64*
Wheat												
Nominal 2/	73,477	83,997	88,101	93,144	99,717	109,724	126,159	145,327	169,807	200,627	232,272	279,552
Real 3/	106	106	104	103	102	99	97*	99*	104*	104*	106*	107*
Corn												
Nominal 2/	11,436	13,013	13,642	14,427	15,392	16,943	19,547	22,412	26,038	30,593	35,262	42,239
Real 3/	74	75	74	73	72	69	69*	69*	69*	68*	67*	67*
Cotton												
Nominal 2/	269	269	269	292	267	280	282*	282	281	279	281	280
Real 3/	87	88	87	86	86	85	83*	83*	82*	82*	80*	80*

1/ Federal Reserve Board index of trade-weighted exchange value of the U.S dollar against 10 other major industrial country currencies, plus Switzerland. These currencies dominate the financing of U.S total trade. 2/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 3/ The real index deflates the nominal series by consumer price changes of the countries involved, resulting in divergence between nominal and real indexes when high-inflation countries figure significantly. The nominal Federal Reserve index shows little divergence between nominal and real indexes because of similar inflation rates among the countries included. *Preliminary.

Information contact: Edward Wilson (202) 786-1790.

Table 29.—Trade Balance

	Fiscal years*									Mar
	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1988
						$ million				
Exports										
Agricultural	40,481	43,780	39,097	34,769	38,027	31,201	26,309	27,859	33,500	3,327
Nonagricultural	169,846	185,423	176,308	159,373	170,014	179,236	176,628	202,331	NA	25,644
Total 1/	210,327	229,203	215,405	194,142	208,041	210,437	202,937	230,190	NA	28,971
Imports										
Agricultural	17,276	17,218	15,485	16,373	18,916	19,740	20,875	20,643	21,000	1,948
Nonagricultural	223,590	237,469	233,349	230,527	297,736	313,722	342,855	367,381	NA	34,875
Total 2/	240,866	254,687	248,834	246,900	316,652	333,462	363,730	388,024	NA	36,823
Trade balance										
Agricultural	23,205	26,562	23,612	18,396	19,111	11,461	5,434	7,216	12,500	1,379
Nonagricultural	-53,744	-52,046	-57,041	-71,154	-127,722	-134,486	-166,227	-165,050	NA	-9,231
Total	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,793	-157,834	NA	-7,852

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987.
1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).
F = forecast. NA = not available.

Information contact: Steve MacDonald (202) 786-1822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal years*				Mar	Fiscal years*				Mar
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	Thousand units					$ million				
EXPORTS										
Animals, live (no) 1/	996	570	275	--	27	255	344	331	--	19
Meats & preps., excl. poult. (mt)	427	451	548	2/500	45	906	1,012	1,300	--	131
Dairy products (mt)	423	480	445	--	34	414	431	490	500	47
Poultry meats (mt)	234	265	376	400	30	257	282	406	--	31
Fats, oils, & greases (mt)	1,217	1,355	1,220	3/1,200	131	608	477	417	--	53
Hides & skins incl. furskins	--	--	--	--	--	1,325	1,440	1,666	--	179
Cattle hides, whole (no) 1/	25,456	25,596	24,337	--	2,222	1,019	1,131	1,254	--	137
Mink pelts (no) 1/	2,237	2,697	2,760	--	222	60	65	103	--	8
Grains & feeds (mt)	93,903	74,358	90,213	--	10,730	13,285	9,472	9,059	4/11,800	1,162
Wheat (mt)	28,523	25,501	28,204	39,000	4,059	4,264	3,260	2,877	5/4,400	402
Wheat flour (mt)	718	1,094	1,305	1,200	16	164	203	207	--	3
Rice (mt)	1,972	2,382	2,454	2,300	189	677	648	551	800	72
Feed grains, incl. prod. (mt)	55,362	36,236	47,605	52,300	5,148	6,884	3,817	3,752	4,600	468
Feeds & fodders (mt)	6,533	8,392	10,113	6/11,000	1,253	1,004	1,286	1,455	--	190
Other grain products (mt)	795	1,015	750	--	89	293	332	284	--	33
Fruits, nuts, and preps. (mt)	1,907	2,003	2,141	--	199	1,687	1,766	2,049	--	167
Fruit juices incl. froz. (hl) 1/	4,641	3,652	4,362	--	536	200	148	185	--	25
Vegetables & preps. (mt)	1,420	1,442	1,625	--	151	946	997	1,174	--	123
Tobacco, unmanufactured (mt)	257	224	224	200	21	1,588	1,318	1,204	1,200	117
Cotton, excl. linters (mt)	1,277	482	1,306	1,400	170	1,945	678	1,419	2,200	268
Seeds (mt)	289	269	305	--	23	352	367	371	400	38
Sugar, cane or beet (mt)	355	375	582	--	13	65	75	113	--	5
Oilseeds & products (mt)	23,803	27,583	29,653	--	3,213	6,195	6,271	6,293	7,700	824
Oilseeds (mt)	17,886	20,684	21,833	21,400	2,100	4,324	4,394	4,408	--	508
Soybeans (mt)	16,621	20,139	21,322	21,200	2,036	3,876	4,174	4,191	4,900	480
Protein meal (mt)	4,606	5,614	6,786	6,200	901	853	1,132	1,347	1,400	206
Vegetable oils (mt)	1,311	1,284	1,035	--	212	1,018	746	538	--	110
Essential oils (mt)	12	7	8	--	1	105	105	111	--	11
Other	443	568	564	--	29	1,069	1,126	1,271	--	127
Total	125,967	109,862	129,210	145,500	14,790	31,201	26,309	27,859	33,500	3,327
IMPORTS										
Animals, live (no) 1/	2,120	1,885	1,994	--	215	569	637	610	700	65
Meats & preps., excl. poult. (mt)	1,123	1,139	1,282	--	127	2,214	2,248	2,797	--	275
Beef & veal (mt)	674	693	778	790	78	1,295	1,252	1,575	1,700	168
Pork (mt)	416	406	462	500	44	847	900	1,125	1,100	98
Dairy products (mt)	418	400	461	465	24	763	786	849	900	67
Poultry and products 1/	--	--	--	--	--	93	101	112	--	7
Fats, oils, & greases (mt)	21	22	21	--	2	18	17	18	--	1
Hides & skins, incl. furskins 1/	--	--	--	--	--	240	200	304	--	36
Wool, unmanufactured (mt)	43	53	59	--	5	145	160	197	--	26
Grains & feeds (mt)	2,070	2,311	2,336	2,600	276	604	668	727	700	73
Fruits, nuts, & preps., excl. juices (mt)	4,483	4,637	4,835	4,725	518	1,891	1,976	2,178	--	234
Bananas & plantains (mt)	3,022	3,042	3,106	3,100	272	752	740	817	800	76
Fruit juices (hl) 1/	35,112	31,539	33,888	30,000	1,899	995	698	728	--	60
Vegetables & preps. (mt)	2,140	2,199	2,446	2,550	320	1,347	1,560	1,509	1,600	173
Tobacco, unmanufactured (mt)	191	208	224	175	18	556	606	634	600	50
Cotton, unmanufactured (mt)	31	41	38	--	2	17	14	7	--	1
Seeds (mt)	92	89	133	120	26	91	111	156	100	19
Nursery stock & cut flowers 1/	--	--	--	--	--	318	353	369	--	38
Sugar, cane or beet (mt)	2,338	1,905	1,492	900	71	912	654	497	--	27
Oilseeds & products (mt)	1,271	1,508	1,572	1,650	135	784	639	579	600	65
Oilseeds (mt)	253	197	165	--	16	98	69	56	--	5
Protein meal (mt)	159	138	245	--	23	17	15	30	--	4
Vegetable oils (mt)	859	1,173	1,162	--	96	670	555	493	--	57
Beverages excl. fruit juices (hl)1/	15,494	15,488	15,549	--	1,182	1,622	1,848	1,923	--	156
Coffee, tea, cocoa, spices (mt)	1,868	1,940	1,915	--	160	4,983	6,099	4,867	--	393
Coffee, incl. products (mt)	1,128	1,223	1,207	1,200	90	3,244	4,400	3,232	2,700	239
Cocoa beans & products (mt)	539	507	503	550	50	1,285	1,189	1,088	1,300	106
Rubber & allied gums (mt)	799	801	824	840	88	680	615	714	900	96
Other	--	--	--	--	--	900	885	868	--	86
Total	--	--	--	--	--	19,740	20,875	20,643	21,000	1,948

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept 30, 1987. -- = not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1987 exports of categories used in the 1988 forecasts were 2/ 503 thousand mt. 3/ 1,204 thousand mt. 4/ 9,302 million. 5/ 3,086 million, i.e. includes flour. 6/ 10,003 thousand mt. 7/ Less than 500,000. F = forecast.

Information contact: Steve MacDonald (202) 786-1822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal years*				Mar	Change from year* earlier				Mar
	1985	1986	1987	1988 F	1988	1985	1986	1987	1988 F	1988
	$ million					Percent				
Western Europe	7,183	6,848	7,203	7,600	848	-22	-5	5	6	25
European Community (EC-12)	6,668	6,432	6,771	7,100	794	-23	-4	5	4	23
Belgium-Luxembourg	470	361	423	--	0	-44	-23	17	--	-100
France	396	431	494	--	0	-22	9	15	--	-100
Germany, Fed. Rep.	900	1,001	1,266	--	131	-29	11	26	--	-3
Italy	677	693	733	--	0	-12	2	6	--	-100
Netherlands	1,926	2,042	1,950	--	235	-14	6	-5	--	27
United Kingdom	628	628	662	--	61	-20	0	5	--	31
Portugal	502	308	268	--	47	-28	-39	-13	--	54
Spain, incl. Canary Islands	832	723	654	--	97	-32	-13	-10	--	50
Other Western Europe	515	415	432	500	55	-16	-19	4	25	57
Switzerland	232	128	145	--	0	-26	-45	13	--	-100
Eastern Europe	532	447	453	600	76	-28	-16	1	20	15
German Dem. Rep.	81	52	66	--	0	-39	-36	27	--	-99
Poland	126	42	63	--	13	-36	-66	50	--	-37
Yugoslavia	137	134	131	--	13	-24	-2	-2	--	-8
Romania	88	112	115	--	17	-43	27	3	--	174
USSR	2,525	1,105	659	1,700	263	1	-56	-40	143	783
Asia	11,933	10,494	11,989	15,200	1,431	-22	-12	14	27	40
West Asia (Mideast)	1,452	1,243	1,663	2,100	165	-22	-14	34	24	3
Turkey	129	111	117	--	15	-42	-13	5	--	-6
Iraq	371	335	524	800	76	-12	-10	56	60	110
Israel	300	255	244	--	20	-15	-15	-4	--	-31
Saudia Arabia	381	335	489	500	37	-23	-12	46	0	-39
South Asia	599	517	345	--	77	-31	-14	-33	--	229
Bangladesh	205	94	111	--	2	31	-54	18	--	-43
India	129	90	93	--	34	-66	-30	3	--	316
Pakistan	228	285	98	400	29	-20	25	-66	300	363
China	239	83	235	500	29	-65	-65	183	150	41
Japan	5,663	5,139	5,553	6,600	662	-18	-9	8	18	54
Southeast Asia	842	724	707	--	107	-31	-14	-2	--	77
Indonesia	204	172	152	--	31	-53	-16	-12	--	202
Philippines	285	269	259	400	32	-5	-6	-4	33	28
Other East Asia	3,138	2,788	3,485	4,300	391	-14	-11	25	23	20
Taiwan	1,342	1,109	1,354	1,600	119	-5	-17	22	14	-4
Korea, Rep.	1,400	1,277	1,693	2,100	231	-23	-9	33	24	40
Hong Kong	396	400	436	500	42	-3	1	9	25	11
Africa	2,527	2,134	1,784	2,200	173	-12	-16	-16	22	24
North Africa	1,207	1,401	1,279	1,600	128	-22	16	-9	23	26
Morocco	156	159	196	--	19	-54	2	23	--	47
Algeria	220	329	244	600	59	36	50	-26	200	71
Egypt	766	875	761	800	34	-13	14	-13	0	-27
Sub-Sahara	1,320	733	505	600	45	-1	-44	-31	20	18
Nigeria	367	158	67	--	4	6	-57	-58	--	-33
Rep. S. Africa	189	70	49	--	8	-64	-63	-30	--	371
Latin America & Caribbean	4,570	3,598	3,765	4,000	352	-13	-21	5	5	12
Brazil	557	445	418	300	4	27	-20	-6	-25	-84
Caribbean Islands	771	752	829	--	77	-7	-2	10	--	12
Central America	361	334	377	--	30	-9	-7	13	--	16
Colombia	238	137	115	--	16	8	-42	-16	--	20
Mexico	1,566	1,114	1,215	1,300	134	-20	-29	9	8	1
Peru	106	108	140	--	12	-53	2	30	--	213
Venezuela	721	493	459	600	55	-7	-32	-7	20	66
Canada	1,727	1,466	1,776	2,000	170	-11	-15	21	11	16
Oceania	204	216	230	200	14	-6	6	6	0	-28
Total	31,201	26,309	27,859	33,500	3,327	-18	-16	6	20	38
Developed countries	15,225	13,954	15,014	16,700	1,719	-21	-8	8	11	32
Less developed countries	12,680	10,719	11,499	14,000	1,241	-15	-15	7	22	24
Centrally planned countries	3,296	1,636	1,347	2,800	367	-16	-50	-18	115	217

*Fiscal years begin October 1 and end September 30. Fiscal year 1987 began Oct. 1, 1986 and ended Sept. 30, 1987.
F = forecast.
Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1822.

Table 32.—Farm Income Statistics

	Calendar Years										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	$ billion										
1. Farm receipts	114.3	133.8	142.0	144.1	147.1	141.1	146.7	149.2	140.2	141	145 to 150
Crops (incl. net CCC loans)	53.2	62.3	71.7	72.5	72.3	67.1	69.4	74.4	63.6	61	64 to 68
Livestock	59.2	69.2	68.0	69.2	70.3	69.4	72.9	69.8	71.6	75	74 to 76
Farm related 1/	1.9	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5	5 to 7
2. Direct Government payments	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	17	12 to 14
Cash payments	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	7	5 to 7
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	10	6 to 8
3. Total gross farm income (4+5+6) 2/	128.4	150.7	149.3	166.3	163.5	153.1	174.7	166.0	159.5	169	168 to 173
4. Gross cash income (1+2)	117.3	135.1	143.3	146.0	150.6	150.4	155.1	156.9	152.0	159	158 to 163
5. Nonmoney income 3/	9.3	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.8	10	8 to 10
6. Value of inventory change	1.9	5.0	-6.3	6.5	-1.4	-10.9	6.2	-2.7	-3.3	-1	0 to 1
7. Cash expenses 4/	84.2	101.7	109.1	113.2	112.5	113.3	116.3	109.6	100.1	103	103 to 106
8. Total expenses	103.2	123.3	133.1	139.4	140.0	140.4	142.7	133.7	122.1	123	123 to 126
9. Net cash income (4-7)	33.1	33.4	34.2	32.8	38.1	37.1	38.8	47.3	52.0	56	53 to 59
10. Net farm income (3-8)	25.2	27.4	16.1	26.9	23.5	12.7	32.0	32.3	37.5	46	42 to 48
Deflated (1982$)	34.9	34.9	18.8	28.6	23.5	12.2	29.7	29.1	32.9	39	36 to 40
11. Off-farm income	29.7	33.8	34.7	35.8	36.4	37.0	38.3	42.5	44.7	48	48 to 50
12. Loan changes 5/: Real estate	7.6	13.0	9.3	9.4	4.0	2.3	-1.1	-6.0	-9.6	-8	-2 to -4
13. 5/: Nonreal estate	8.3	10.9	5.9	6.2	3.4	0.9	-0.8	-9.6	-10.7	-5	-2 to -4
14. Rental income plus monetary change	4.1	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	8	8 to 10
15. Capital expenditures 5/	17.9	19.9	18.0	16.8	13.3	12.7	12.5	9.6	8.6	8	9 to 11
16. Net cash flow (9+12+13+14-15)	35.1	43.7	37.5	37.9	38.4	32.9	33.3	30.9	30.9	43	45 to 50

1/ Income from machine hire, custom work, sales of forest products, and other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar years 1/										
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
	$ billion										
Assets											
Real estate	601.9	706.2	782.9	784.7	748.8	739.6	639.6	558.9	510.1	523	534 to 544
Non-real estate	175.3	201.6	213.2	212.0	212.2	205.4	208.9	191.2	181.5	191	188 to 194
Livestock & poultry	51.3	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	58	57 to 61
Machinery & motor vehicles	75.5	85.8	93.1	101.4	102.0	100.8	96.9	87.7	80.4	78	78 to 82
Crops stored 2/	25.3	29.2	33.0	29.1	27.7	23.7	29.6	23.1	18.4	19	14 to 18
Financial assets	23.1	25.3	26.5	28.0	29.5	31.3	32.8	34.2	35.0	37	36 to 38
Total farm assets	777.2	907.8	996.1	996.7	961.0	945.0	848.5	750.1	691.6	714	725 to 735
Liabilities											
Real estate 3/	66.7	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.1	81	76 to 80
Non-real estate 4/	60.7	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	62	56 to 60
Total farm liabilt.	127.4	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.0	143	132 to 142
Total farm equity	649.7	756.2	829.3	814.4	771.5	752.3	657.7	574.9	536.6	571	590 to 600
	Percent										
Selected ratios											
Debt-to-assets	16.4	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.4	20	17 to 20
Debt-to-equity	19.6	20.0	20.1	22.4	24.6	25.6	29.0	30.5	28.9	25	20 to 24
Debt-to-net cash income	385	454	488	556	497	519	492	371	298	245	230 to 247

1/ As of December 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts from Farm Marketings, by State

Region State	Livestock & Products				Crops 1/				Total 1/			
	1986	1987	Feb 1988	Mar 1988	1986	1987	Feb 1988	Mar 1988	1986	1987	Feb 1988	Mar 1988
						$ million 2/						
North Atlantic												
Maine	223	243	18	19	143	170	13	14	365	413	31	33
New Hampshire	72	66	6	6	38	38	3	3	109	104	8	9
Vermont	361	377	28	31	36	35	2	2	398	412	30	33
Massachusetts	131	124	10	11	292	269	9	14	423	393	19	25
Rhode Island	12	12	1	1	63	63	3	4	75	75	4	5
Connecticut	210	196	14	15	162	170	9	13	372	366	24	29
New York	1,809	1,800	128	151	724	724	49	44	2,533	2,524	177	195
New Jersey	150	140	11	12	430	424	17	25	580	563	28	37
Pennsylvania	2,239	2,319	183	204	926	911	72	78	3,165	3,230	255	282
North Central												
Ohio	1,566	1,614	120	131	2,043	1,807	111	139	3,610	3,422	231	270
Indiana	1,852	1,856	137	143	2,258	2,017	156	142	4,110	3,873	293	286
Illinois	2,143	2,261	153	173	4,737	3,913	294	334	6,880	6,174	447	507
Michigan	1,236	1,285	90	106	1,429	1,220	106	93	2,664	2,505	196	200
Wisconsin	4,164	4,220	308	363	892	802	43	35	5,057	5,022	351	398
Minnesota	3,395	3,645	274	304	2,680	2,170	120	128	6,074	5,815	395	432
Iowa	4,982	5,270	446	442	4,124	3,510	164	207	9,106	8,780	610	649
Missouri	1,930	2,173	208	206	1,586	1,516	121	120	3,516	3,690	329	325
North Dakota	676	760	92	73	1,623	1,548	106	90	2,299	2,308	199	163
South Dakota	1,525	1,909	171	159	938	815	65	56	2,463	2,724	237	215
Nebraska	4,260	4,848	370	364	2,669	1,975	111	100	6,928	6,823	481	464
Kansas	3,447	3,914	376	358	1,978	1,806	110	135	5,425	5,720	485	493
Southern												
Delaware	402	370	31	32	118	114	5	6	520	484	36	38
Maryland	814	734	59	62	371	394	19	25	1,186	1,129	78	87
Virginia	1,127	1,244	89	112	486	454	20	20	1,613	1,698	109	132
West Virginia	156	169	11	14	71	57	3	2	227	226	15	17
North Carolina	2,174	2,081	134	156	1,608	1,593	36	41	3,782	3675	170	197
South Carolina	455	461	32	37	440	472	14	15	894	933	46	52
Georgia	1,882	1,826	155	157	1,324	1,254	34	54	3,206	3,080	189	211
Florida	1,000	1,102	96	105	3,688	4,088	563	406	4,688	5,190	659	512
Kentucky	1,311	1,506	83	103	1,079	913	36	48	2,389	2,419	119	151
Tennessee	1,033	1,107	100	107	891	826	34	36	1,924	1,933	134	143
Alabama	1,431	1,560	146	176	578	588	22	30	2,009	2,148	168	206
Mississippi	1,044	1,040	76	91	741	938	72	39	1,785	1,978	148	130
Arkansas	2,017	2,116	140	160	1,005	1,027	61	64	3,022	3,144	200	223
Louisiana	503	521	37	46	869	898	53	27	1,372	1,419	90	74
Oklahoma	1,875	2,052	224	187	746	681	55	45	2,622	2,734	279	232
Texas	5,516	6,059	452	520	2,928	3,013	379	219	8,444	9,072	831	739
Western												
Montana	720	760	56	66	493	587	58	55	1,213	1,347	114	121
Idaho	884	926	102	100	1,042	1,121	51	56	1,925	2,047	153	155
Wyoming	455	528	49	42	111	114	5	4	566	643	54	46
Colorado	2,218	2,321	201	205	890	873	53	50	3,109	3,194	253	255
New Mexico	708	817	34	49	302	336	15	18	1,010	1,153	49	68
Arizona	699	774	68	88	796	1,019	49	132	1,495	1,793	117	219
Utah	437	462	34	37	134	136	11	9	570	599	45	46
Nevada	160	167	15	14	72	76	6	7	232	243	21	21
Washington	981	979	78	87	1,812	1,829	109	108	2,793	2,808	187	196
Oregon	649	655	45	56	1,135	1,204	61	62	1,784	1,859	106	118
California	4,446	4,741	349	415	9,602	10,325	563	697	14,049	15,066	912	1,112
Alaska	10	11	1	1	19	18	1	1	29	29	2	2
Hawaii	84	88	7	8	491	494	37	42	575	582	44	49
United States	71,573	76,211	6,047	6,505	63,612	61,350	4,109	4,097	135,185	137,561	10,155	10,601

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1987			1988		
	1982	1983	1984	1985	1986	1987	Mar	Nov	Dec	Jan	Feb	Mar
	$ million											
Farm marketings & CCC loans *	142,594	136,580	142,314	144,193	135,185	137,561	9,583	15,457	12,302	13,042	10,155	10,601
Livestock & products	70,257	69,437	72,936	69,780	71,573	76,211	6,151	6,668	5,863	6,608	6,047	6,505
Meat animals	40,917	38,893	40,832	38,589	39,137	44,716	3,585	3,950	3,403	4,179	3,889	4,001
Dairy products	18,234	18,763	17,944	18,063	17,824	17,829	1,532	1,445	1,518	1,404	1,282	1,495
Poultry & eggs	9,520	9,979	12,192	11,191	12,678	11,485	893	974	806	865	753	863
Other	1,586	1,801	1,968	1,937	1,934	2,182	142	299	137	159	123	145
Crops	72,338	67,143	69,378	74,413	63,612	61,350	3,432	8,789	6,439	6,434	4,109	4,097
Food grains	11,412	9,713	9,576	9,080	5,948	5,409	221	350	425	421	421	347
Feed crops	17,409	15,535	15,831	22,479	17,849	13,021	507	2,671	1,323	1,614	846	812
Cotton (lint and seed)	4,457	3,705	3,270	3,730	2,920	4,006	48	958	922	718	444	240
Tobacco	3,342	2,768	2,841	2,722	1,918	1,827	10	159	384	31	3	0
Oil-bearing crops	13,817	13,546	13,894	12,595	10,507	10,798	538	1,889	1,122	1,487	731	748
Vegetables & melons	8,063	8,462	9,142	8,558	8,705	9,230	885	433	413	1,017	520	804
Fruits & tree nuts	6,846	6,064	6,768	6,836	6,900	7,547	390	984	777	523	525	304
Other	6,993	7,352	8,057	8,413	8,865	9,513	832	1,345	1,072	624	619	841
Government payments	3,492	9,295	8,430	7,704	11,813	16,747	2,106	300	1,417	71	105	1,160
Total	146,086	145,875	150,744	151,897	146,998	154,308	11,689	15,757	13,719	13,113	10,260	11,761

* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar years									
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1988 F
	$ million									
Feed	19,314	20,971	20,855	18,592	21,725	19,852	18,015	16,179	16,100	16,500 to 18,500
Livestock	13,012	10,670	8,999	9,684	8,814	9,498	8,996	9,609	11,900	10,000 to 12,000
Seed	2,904	3,220	3,428	3,172	2,993	3,448	3,350	2,984	3,000	3,000 to 4,000
Farm-origin inputs	35,230	34,861	33,282	31,448	33,532	32,798	30,361	28,772	31,000	29,000 to 34,000
Fertilizer	7,369	9,491	9,409	8,018	7,067	7,429	7,259	5,787	5,400	5,500 to 6,500
Fuels & oils	5,635	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,400	4,200 to 5,200
Electricity	1,447	1,526	1,747	2,041	2,146	2,166	2,150	2,121	2,400	2,000 to 3,000
Pesticides	3,436	3,539	4,201	4,282	4,154	4,767	4,817	4,331	4,600	3,600 to 4,600
Manufactured inputs	17,887	22,435	23,927	22,229	20,870	21,505	20,810	17,029	16,900	16,000 to 19,000
Short-term interest	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,795	7,100	5,500 to 6,500
Real estate interest 1/	6,190	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,100	7,500 to 8,500
Total interest charges	13,058	16,261	19,864	21,830	21,430	21,129	18,699	16,926	15,200	13,000 to 15,000
Repair & operation 1/ 2/	6,754	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,500	6,500 to 7,500
Hired labor	8,981	9,293	8,931	10,075	9,726	9,729	9,792	9,875	10,800	10,000 to 12,000
Machine hire & custom work	2,063	1,823	1,984	2,025	1,896	2,170	2,184	1,791	2,000	1,200 to 2,200
Marketing, storage, & transportation	3,162	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,800	3,500 to 4,500
Misc. operating expenses 1/	6,771	6,881	6,909	7,262	8,439	8,450	7,942	7,344	8,200	7,000 to 8,000
Other operating expenses	27,732	28,142	28,368	30,889	31,143	31,433	30,579	29,519	31,300	29,000 to 34,000
Capital consumption 1/	19,345	21,474	23,573	24,287	23,873	23,105	20,891	18,997	17,300	17,000 to 18,000
Taxes 1/	3,871	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,300	3,700 to 4,700
Net rent to non-operator landlord	6,182	6,075	6,184	6,059	5,060	8,640	8,124	6,684	6,900	7,300 to 8,300
Other overhead expenses	29,398	31,440	34,003	34,381	33,402	35,805	33,247	29,806	28,500	28,000 to 31,000
Total production expenses	123,305	133,139	139,444	139,978	140,375	142,669	133,696	122,052	123,000	123,000 to 126,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses includes other livestock purchases and dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Richard Kodl (202) 786-1808; Chris McGath (202) 786-1804.

Table 37.—CCC Net Outlays by Commodity & Function

	Fiscal years										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 E	1989 E
	$ million										
COMMODITY/PROGRAM											
Feed grains	1,144	1,286	-533	5,397	6,815	-758	5,211	12,211	13,967	12,568	11,050
Wheat	308	879	1,543	2,238	3,419	2,536	4,691	3,440	2,836	1,083	1,524
Rice	49	-76	24	164	664	333	990	947	906	189	320
Upland cotton	141	64	336	1,190	1,363	244	1,553	2,142	1,786	42	229
Tobacco	157	-88	-51	103	880	346	455	253	-346	-433	-323
Dairy	24	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,166	1,227	936
Soybeans	4	116	87	169	288	-585	711	1,597	-476	-1,069	-305
Peanuts	27	28	28	12	-6	1	12	32	8	3	1
Sugar	313	-405	-121	-5	49	10	184	214	-65	-14	--
Honey	-2	9	8	27	48	90	81	89	73	70	56
Wool	39	35	42	54	94	132	109	123	152	125	127
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	656	-113	1,340	-225	-1,542	1,295	-314	486	371	2,013	1,234
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140
FUNCTION											
Price support loans	2	-66	174	7,015	8,438	-27	6,272	13,628	12,199	8,222	5,514
Direct payments	1,811	418	1,030	1,491	3,600	2,117	7,827	6,746	5,862	3,983	6,023
Purchases	10	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	-633	399
Producer storage payments	247	254	32	679	964	268	329	485	832	565	522
Processing, storage, & transportation	128	259	323	355	665	639	657	1,013	1,659	1,494	1,058
Operating expense	97	157	159	294	328	362	346	457	535	568	583
Interest expenditure	238	518	220	-13	3,525	1,064	1,435	1,411	1,219	836	1,196
Export programs	417	-669	-940	65	398	743	134	102	276	449	512
Other	662	200	1,436	-265	-1,607	679	-648	329	305	2,173	1,333
Total	3,612	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	17,657	17,140

E = estimated in the fiscal 1989 President's Budget. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148

Transportation

Table 38.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1987			1988			
	1985	1986	1987 P	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Rail freight rate index 1/ (Dec 1984=100)										
All products	100.0	100.7	100.1	100.1	100.2	100.1	103.3 P	103.3 P	103.4 P	105.2 P
Farm products	99.0	99.6	99.3	99.2	99.7	99.3	101.9 P	102.0 P	102.3 P	105.0 P
Grain	98.3	98.9	98.7	98.6	99.1	98.5	101.2 P	101.2 P	101.6 P	102.9 P
Food products	100.1	99.9	98.6	98.5	98.7	98.7	102.4 P	102.4 P	102.4 P	103.8 P
Grain shipments										
Rail carloadings (thou cars) 2/	22.9	24.4	29.0	25.0	30.8 P	29.0 P	30.8 P	33.2 P	34.2 P	33.0 P
Fresh fruit & vegetable shipments										
Piggy back (thou cwt) 3/ 4/	602	629	575	673	495 P	478 P	428 P	473 P	484 P	539 P
Rail (thou cwt) 3/ 4/	532	563	654	616	716 P	742 P	785 P	613 P	635 P	533 P
Truck (thou cwt) 3/ 4/	8,298	9,031	9,187	9,838	8,605 P	8,383 P	8,980 P	8,766 P	9,622 P	10,506 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	116.1	113.1	116.3	115.1	117.8	118.5	118.1	118.3	118.3	118.9
Fleet operation (cts/mile)	116.7	113.6	116.5	115.0	118.1	118.3	118.0	118.1	117.7	118.4

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1987 and 1988. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

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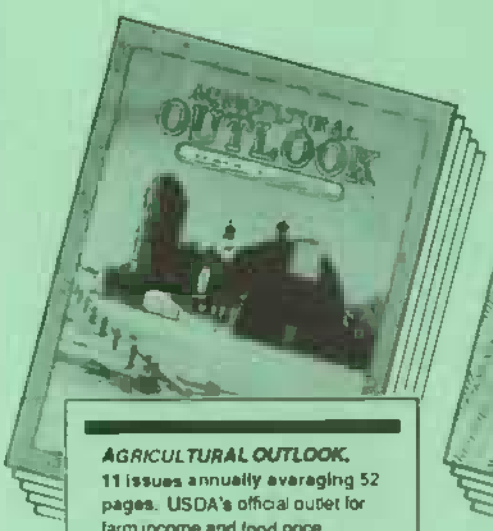

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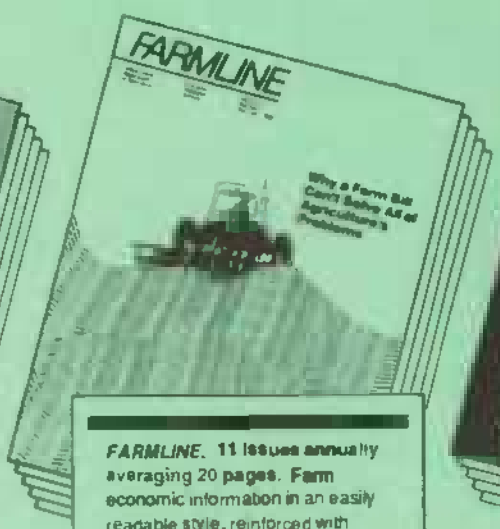

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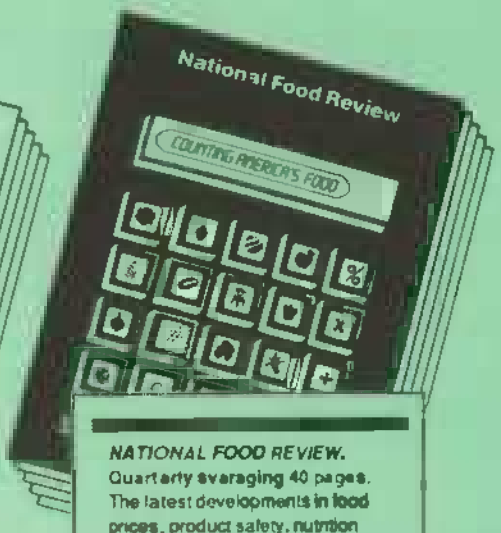

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